REPORT

...OF THE...

COMMISSIONER OF AGRICULTURE

...OF THE...

STATE OF FLORIDA

FOR THE PERIOD

Beginning January 1, 1897, and ending December 31, 1898.

TALLAHASSEE, FLA.:
TALLAHASSEEAN BOOK AND JOB PRINT.
1899.

REPORT

OF THE

Commissioner of Agriculture.

TALLAHASSEE, FLA., January 1st, 1899.

To His Excellency, W. D. BLOXHAM,
Governor of the State of Florida:

SIR—I have the honor to submit my report as Commissioner of Agriculture for the years of 1897 and 1898.

LANDS.

Report of Salesman of State Lands:

SWAMP LANDS.

Since the first day of January, 1897, the following Patents for Swamp Lands have been received from the United States, to-wit:

Patent No.	116	—Gainesville District	.....	841.25
"	117	"	.....	160.00
"	118	"	.....	351,240.00
"	119	"	.....	724.32
"	120	"	.....	12,922.44
"	121	"	.....	372.38
"	122	"	.....	278.25
"	123	"	.....	377.87
Total			.....	366,916.51
Quantity previously patented, as shown by report of Commissioner of January 1, 1897			.....	16,734,852.19
Making total patents received			.....	17,101,768.70

The quantity disposed of prior to Jan. 1, 1897, as shown by last report of Commissioner.....	15,618,840.33	
Amount entered by S. I Wiles on his account as State agent in 1897 and 1898.....	4,276.69	
Amount conveyed to Railroads and Canals in 1897.....	431,995.26	
Amount conveyed and charged to Railroads and Canals in 1898..	615,461.05	
Amount sold in 1897	6,311.52	
Amount sold in 1898.....	2,819.03	
Total disposed of up to January 1, 1899.....		16,679,703.88
Leaving balance on hand January 1, 1899.....		422,064.82

List of Swamp Lands Sold, Including Lands Sold under the Provisions of Section 436, Revised Statutes, at 25c per Acre, During the year 1897.

No. Entry	Acres.	Amount.	No. Entry.	Acres.	Amount.
15,242	40.00	$ 10 00	15,286	39.96	$ 9 99
15,246	40.00	10 00	15,287	80.00	20 00
15,247	40.12	10 03	15,290	53.23	15 81
15,248	95.60	23 90	15,291	68.90	17 23
15,249	80.11	20 03	15,292	80.91	20 23
15,250	80.25	20 06	15,293	40.00	10 00
15,251	39.97	9 99	15,294	40.00	10 00
15,252	8.00	8 00	15,295	40.02	10 00
15,253	39.97	9 99	15,296	40.00	10 00
15,254	75,92	18 98	15,298	80.00	20 00
15,255	78.97	19 74	15,299	40.00	10 00
15,256	77.70	19 43	15,300	39.98	10 00
15,257	71.00	17 75	15,301	80.00	20 00
15,258	71.40	17 85	15,303	80.00	20 00
15,259	88.74	22 19	15,304	57.08	14 27
15,260	78.30	19 58	15,305	40.00	10 00
15,261	98.84	24 71	15,307	40.06	10 02
15,262	79.00	19 75	15,310	10.00	2 50
15,263	63.35	15 84	15,311	19.50	4 88
15,264	74.02	18 50	15,312	40.00	10 00
15,265	86.65	21 66	15,313	16.80	4 20
15,266	85.42	21 35	15,315	30.00	30 00
15,268	25.75	25 75	15,317	70.50	17 63
15,269	40.05	10 01	15,318	73.95	18 49
15,270	40.15	10 04	15,319	78.80	19 70
15,271	69.00	17 25	15,320	81.75	20 44
15,272	41.70	10 42	15,321	65.86	16 47
15,273	32.20	8 05	15,322	71.54	17 89
15,276	79.96	19 99	15,323	62.55	15 64
15,277	40.20	10 05	15,324	26.82	6 70
15,278	420.00	252 00	15,327	80.00	20 00
15,279	88.19	22 05	15,329	39.97	10 00
15,280	71.00	17 75	15,331	80.00	20 00
15,281	39.96	9 99	15,333	80.00	20 00
15,284	396.70	257 85	15,334	40.00	10 00
15,285	40.06	10 01	15,335	39.94	9 99

List of Swamp Lands—Continued.

No. Entry	Acres.	Amount.	No. Entry.	Acres.	Amount.
15,336	40.00	$10 00	15,353	80.00	$ 20 00
15,337	40.00	10 00	15,356	40.45	10 11
15,338	39.96	9 99	15,359	80.56	20 14
15,339	39.78	9 95	15,360	40.08	10 02
15,340	86.58	21 65	15,365	39.79	10 00
15,341	78.08	19 52	15,368	80.03	20 00
15,343	40.09	10 02	15,369	40.05	10 05
15,344	39.76	9 94	15,370	40.16	10 04
15,345	40.02	10 00	15,373	40.00	10 00
15,346	112.00	28 00	15,374	40.02	10 00
15,347	40.28	10 07	15,378	40.08	10 02
15,348	39.88	9 97	15,379	40.09	10 02
15,350	40.10	10 02	15,380	40.10	10 02
15,352	79.78	19 95	15,381	47.43	11 86
			Total 1897	6,311.52	$1,933 98

List of Swamp Lands Sold, Including Lands Sold under the Provisions of Section 436, Revised Statutes, at 25c per Acre, During the year 1898.

No. Entry	Acres.	Amount.	No. Entry.	Acres.	Amount.
15,383	40.00	$ 10 00	15,414	39.80	$ 9 95
15,384	40.05	10 01	15,415	85.90	21 48
15,385	39.92	9 98	15,416	71.70	17 92
15,386	80.12	20 03	15,417	80.13	20 03
15,387	40.08	10 02	15,418	80.31	20 08
15,388	39.91	9 98	15,422	80.25	20 06
15,389	40.00	40 00	15,423	113.00	113 00
15,390	80.00	20 00	15,426	40.01	40 01
15,396	40.00	10 00	15,434	63.55	15 89
15,401	80.00	20 00	15,435	80.00	20 00
15,402	80.29	20 07	15,437	81.46	20 37
15,403	80.29	20 07	15,438	81.46	20 37
15,404	39.83	9 95	15,439	81.46	20 37
15,405	40.00	10 00	15,443	40.00	10 00
15,406	40.00	10 00	15,445	80.00	20 00
15,407	40.25	10 06	15,447	80.49	20 12
15,408	40.09	10 02	15,448	80.49	20 12
15,409	115.00	28 75	15,449	80.49	20 12
15,411	80.15	20 04	15,450	80 00	20 00
15,412	79.94	19 99	15,451	159.75	79 88
15,413	82.86	20 71			
			Total 1898	2,819.03	$ 889 45

RAILROADS.

List of Railroad and Canal Companies which have received Swamp Lands Under Their Respective Grants.

Date.	No. of Deed.	Corporation.	Acres.
Jan. 7, 1897	15,243	Florida Coast Line, Canal and Transportation Company. Under Act of the Legislature, May 29, 1889.	104,091.96
Feb. 24, 1897	15,267	Louisville and Nashville Railroad Company, formerly Pensacola and Atlantic Railroad Company. Under Act of the Legislature, March 4, 1881.	2,298.67
Apr. 19, 1897	15,289	Disston Land Company, on account Atlantic and Gulf Coast Canal and Okeechobee Land Company, under modified contract of Aug. 17, 1888.	644.40
May 31, 1897	15,302	P. W. White, on account of Florida Coast Line, Canal and Transportation Company. Under Act of the Legislature, May 29, 1889.	71.09
July 2, 1897	15,316	Jacksonville, Tampa and Key West Railway Company. Under Act of the Legislature, March 4, 1879.	34,560.00
Sept. 7, 1897	15,342	James M. Graham and B. F. Hampton, on account of Florida Coast Line Canal and Transportation Company. Under Act of Legislature, of May 29, 1889.	40.00
Oct. 15, 1897	15,354	Silver Springs, Ocala and Gulf Railroad Company. Under Act of Legislature, March 12, 1879 and May 3, 1889.	11,029.14
Oct. 15, 1897	15,355	Same.	88,980 00
		Total, 1897.	241,715 26
Feb. 8, 1898	15,391	Jacksonville, Tampa and Key West Railway Company. Under Acts of the Legislature of March 4, and 12, 1879.	1,905.01
	15,392	Same.	5,473.53
	15,393	Same.	14,190 59
	15,394	Same.	50,510.01

RAILROADS—Continued.

List of Railroad and Canal Companies which have received Swamp Lands Under Their Respective Grants.

Date.	No. of Deed.	Corporation.	Acres.
June 7, 1898	15,029	Atlantic and Gulf Coast Canal and Okeechobee Land Company.	543,382.91
	to 15,035	On the 7th day of June, 1898, Deeds Numbered 15,029 to 15,035 inclusive, which were issued to the "Disston Land Company" March 21, 1895, on account of the "Atlantic and Gulf Coast Canal and Okeechobee Land Company," under modified contract of Aug. 17, 1888, and held pending the adjustment of claims of settlers, were delivered, and the same is now charged to said Company, embracing 546,590 $\frac{51}{100}$ acres, less Deeds Nos. 15,091, 15,106 and 15,289, embracing 3.207 $\frac{88}{100}$ acres, issued in 1895 and '97, covering a part of same lands embraced in Deeds 15,029 to 35.	
		Total, 1898.	615,461.05
		Also, there has been conveyed to railroads, on account of certificates previously issued, for lands which the State has since received patents.	
July 2, 1897	13,816 D and 13,835½	Louisville and Nashville Railroad Company, formerly Pensacola and Atlantic Railroad Company.	190,280.00

By mutual agreement between the Trustees of the Internal Improvement Fund and the attorney for the Jacksonville, Tampa and Key West Railway Company on the 9th of February, 1898, a suit which had been pending in the Supreme Court of the State of Florida for the past ten years against the Trustees was dismissed upon motion of the attorney for the Railroad Company by the dismissal of this suit several questions were settled and the Fund relieved of litigation that would have been costly, and perhaps unsettled claims which now are permanently disposed of.

Statement of Lands Due Railroads, January 1, 1899:

Miles.	Acres per Mile.	Total Granted.	Total Conveyed.	Balance Due.	Name of Company.
161.00	20,000	3,220,000.00	*2,202,623.01	1,017,376.99	Pensacola and Atlantic.
282.22	10,000	2,882,200.00	*2,580,209.72	301,990.28	Florida Southern.
55.00	10,000	550,000.00	530,303.38	19,696.62	Jacksonville, Tampa and Key West.
70.00	6,000	420,000.00	419,677.45	322.55	Palatka and Indian River.
65.15	10,000	651,500.00	494,145.45	157,354.55	Silver Springs, Ocala and Gulf.
48.82	15,000	732,300.00	*219,294.78	513,005.22	Carrabelle, Tallahassee and Georgia, formerly the Augusta, Tallahassee and Gulf.
28⅓	5,000	141,666.66	50,890.74	90,775.92	Blue Springs, Orange City and Atlantic.

*In estimating the amounts conveyed to the several Land Grant Railroads, the unpatented lands, for which certificates were given, have been included. A great deal of the land embraced in these certificates never will be patented to the State, and therefore can never be conveyed by deed to the railroad company which holds the certificate. This is mentioned merely in justice to the railroads.

Statement of Lands Due Railroads, with grants allowing them to take Lands outside of the six and twenty-mile limits to make up an area of 3,840 acres per mile.

Miles.	Acres per Mile.	Total Granted.	Total Conveyed.	Balance Due.	Name of Company.
40.00	3,840	153,600	60,424.71	93,175.29	South Florida Railroad Company on road from Sanford to Kissimmee.
32.90	3,840	126,336	29,899.68	96,436.32	Western Railway of Florida.

Swamp Land Indemnity.

The quantity of lands located by the respective owners of Swamp Land Indemnity Certificates, which have been patented to the State, is as follows:

Total amount, as per last report	65,977.94
Of which there have been conveyed by the State to the owners of the Certificates, or to such persons as they direct, as per last report	55,074.94
Errors in report of 1881 and 1882, (in excess)	601.19
Errors in areas given in Patents, in excess of actual areas, and also Lands Reconveyed to United States Government, not reported	209.13
Total	55,885.26

INTERNAL IMPROVEMENT LANDS.

Amount on hand January 1, 1897, (by actual calculation)		101,257.37
Amount sold in 1897	4,314.93	
Amount sold in 1898	2,253.54	6,568.47
Balance on hand January 1, 1899		94,688.90

List of Internal Improvement Lands Sold During the Years 1897 and 1898.

No. Entry.	Acres.	Amount.	No. Entry.	Acres.	Amount.
15,245	94.87	$94 87	15,395	40.06	$50 07
15,306	58.93	58 93	15,410	40.40	50 50
15,308	2,596.55	2,336 90	15,419	60.83	76 04
15,309	40.01	50 01	15,421	168.90	253 35
15,314	142.23	106 67	15,424	165.02	247 53
15,330	91.34	157 11	15,425	52.41	65 51
15,349	40.00	50 00	15,428	80.10	80 10
15,357	40.00	50 00	15,432	165.40	206 75
15,363	160.24	96 14	15,436	680.00	850 00
15,382	40.00	50 00	15,442	39.88	39 88
			15,444	39.69	39 69
			15,454	40.02	40 02
Total 1897	3,304.17	$3,050 63	Total 1898	1,572.71	$1,999 44

List of Internal Improvement Lands Sold under the Provisions of Section 449 to 453, Revised Statutes, during the years 1897 and 1898.

No. of Entry.	Acres.	Amount of Sales.	Cash Paid.	No. of Entry.	Acres.	Amount of Sale.	Cash Paid.
15,288	40.09	50 12	16 70	15,397	80.06	100 08	33 50
15.297	40.12	50 15	16 75	15 399	80.00	100 00	33 34
15.326	40.10	50 12	16 75	15,400	40 04	50 05	16 75
15.328	129.65	162 07	54 00	15.420	39.84	49 80	16 75
15.332	40.09	50 12	16 75	15.427	40.33	50 41	16 75
15.351	39.87	49 84	16 75	15.429	40 62	50 78	16 67
15.358	39.87	49 84	16 75	15.433	80.00	100 00	33 50
15,361	40.15	60 23	20 00	15,441	80.00	100 00	33 50
15 362	40.15	60 22	20 10	15.446	40.00	50 00	16 75
15.364	79.90	99 88	33 35	15 452	80.03	100 04	33 35
15.366	40.00	50 00	16 70	15,453	79.91	99 89	33 50
15.367	39.92	49 90	16 75				
15.371	40 00	50 00	16 75	Total '98	680 83	$ 851 05	$ 284 36
15,372	40 76	50 95	16 75				
15,375	160 06	200 07	66 67				
15,376	80 03	100 03	33 33				
15,377	80.00	100 00	33 35				
Total '97	1,010.76	$1,283 53	$ 428 29				

List of Internal Improvement Lands Sold under the Provisions of Sections 449 to 453, Revised Statutes, Prior to January 1, 1897, upon which Payments were made during the Years 1897 and 1898.

No. of Entry.	No. of Installment.	Amount Paid.	No. of Entry.	No. of Installment.	Amount Paid.
13,823	2 and 3	53 33	14.479	2 and 3	40 06
14,872	3	16 98	14.930	2 and 3	32 30
14.900	2 and 3	33 18	14.973	3	16 66
14.915	3	20 04	14.995	2	16 73
14.918	3	49 42	15.002	3	33 66
14.927	2 and 3	66 79	15 014	2 and 3	33 18
14 932	3	16 76	15.016	3	16 08
14 933	2 and 3	100 83	15.099	3	32 95
14.981	3	16 56	15.100	3	32 95
15 002	2	33 66	15.103	3	66 35
15.016	2	16 10	15.117	3	16 33
15 085	2 and 3	33 19	15.122	2	16 70
15 099	2	32 94	15 132	3	15 71
15.100	2	32 94	15.134	2	16 60
15.103	2	66 67	15 157	2	67 31
15.117	2	17 00	15 201	3	16 91
15 132	2	17 70	15,211	2	20 10
15,201	2	16 91			
Total 1897..	.....	$ 641 00	Total 1898	.....	$ 490 58

Within the past few years, with consi erable correspondence with the General Land Office and with the Register and Receiver of the Gainesville Land Office, there has been adjusted a claim for Internal Improvement Land of something over 2 000 acres, which will be approved to the State and sold, the proceeds of which will go to the relief of bonded counties. This matter has been arranged without any expense to the State for selecting or locating the land. This acreage due the State for lands under the Internal Improvement Act of September 4. 1841. occurred by reason of lands originally selected for the State of Florida, but was discovered to lie in the States of Alabama and Georgia.

SCHOOL LANDS.

Amount on hand January 1, 1897. (approximated).....		355,775 13
Amount of School Indemnity Lands approved in 1897 ...		199 97
Total.....		355,975.10
Amount sold in 1897.....	9,934.24	
Amount sold in 1898.....	4,147.66—	14,081.90
Balance on hand January 1, 1899		341,893.20

List of School Lands Sold During the Years 1897 and 1898.

No. of Entry.	Acres.	Amount.	No. of Entry.	Acres.	Amount.
2,858	40.01	$ 50 01	2,907	80 00	$ 100 00
2,861	39.98	49 97	2,908	40 00	50 00
2,862	40.10	50 12	2,911	642.75	642 75
2,863	2,281.90	1,140 95	2,912	79.86	39 93
2,864	39.94	49 93	2 913	239.58	119 79
2,866	79.81	99 76	2,915	40 05	50 06
2 869	320 00	240 00	2,916	39.95	39 95
2,870	400.30	240 18	2,920	40 08	50 10
2,872	40.00	50 00	2,923	220.31	275 39
2,873	40 00	50 00	2,926	40.05	40 05
2,874	40.10	50 12	2,930	519.84	350 90
2,877	40.18	50 22	2,931	638.25	398 90
2,878	520.00	371 80	2,932	85 22	106 33
2,881	40 10	50 13	2 933	40.09	40 09
2,883	80.66	80 66	2,934	560 00	280 00
2,885	39.98	49 98	2,936	80 19	80 19
2,886	39 98	49 97			
2,887	653 36	326 68	Total 1898..	3,386 22	$2 664 43
2,892	40 00	50 00			
2,895	1,920.00	1,296 0			
2,896	40 09	50 12			
2 897	640.55	800 69			
2,899	639 84	447 89			
2,901	40.00	50 00			
2,904	40.00	50 00			
2,905	199.97	249 96			
2,906	639.84	319 92			
Total 1897..	8,976.69	$6,365 06			

List of School Lands Sold Under the Provisions of Sections 449 to 453, Revised Statutes, During the Years 1897 and 1898.

No. of Entry.	Acres.	Amount of Sale.	Cash Paid.	No. of Entry.	Acres.	Amount of Sale.	Cash Paid.
2,857	80.02	$100 02	$66 70	2,909	39.94	$ 49 93	$ 16 70
2,859	40.05	50 06	13 34	2,910	80.45	100 56	33 35
2,860	40.08	50 10	16 75	2,914	80.09	100 11	30 35
2,865	40 00	50 00	40 00	2,917	39.96	49 95	16 75
2,868	39.95	49 94	16 75	2,918	40.19	50 24	16 75
2,871	39.88	49 85	16 75	2,919	40.00	50 00	16 75
2,875	77.91	99 89	33 33	2,921	40.12	50 15	16 75
2,876	40.07	50 11	16 75	2,922	40.00	50 00	16 75
2,879	40.11	50 14	16 75	2,924	80.06	80 06	26 66
2,880	39 65	49 56	33 16	2,927	40.00	50 00	16 76
2,884	80.09	100 11	66 76	2,928	160.33	200 41	67 00
2,888	39 98	49 98	16 66	2,929	40 13	50 16	16 75
2,889	79.88	99 85	33 33	2,937	40.17	50 21	16 70
2,890	40.25	50 31	16 75				
2,891	40.18	50 23	16 75	To'l 1898	761.44	$931 78	$307 96
2,894	79.66	99 58	33 35				
2,902	79.84	99 80	33 5				
2,903	39.95	49 94	16 75				
To'l 1897	957.55	$1,199 47	$503 98				

List of School Lands Sold Under the Provisions of Sections 449 to 453, Revised Statutes, Prior to January 1, 1897, Upon which Payments were made During the Years 1897 and 1898.

No of Entry.	No. of Installment.	Amount Paid.	No. of Entry.	No. of Installment.	Amount Paid.
2,502	2 and 3	$33 26	2,689	2 and 3	$100 59
2,508	2 and 3	33 25	2,739	3	16 27
2,548	2 and 3	30 00	2,755	3	33 30
2,599	2 and 3	33 28	2,771	3	33 35
2,650	3	15 01	2,790	2 and 3	33 00
2,663	3	16 75	2,792	3	16 73
2,677	3	12 50	2,805	3	16 66
2,678	3	33 32	2,806	2 and 3	132 91
2,690	3	16 64	2,812	2 and 3	33 28
2,712	3	66 63	2,813	2	16 68
2,724	2 and 3	40 50	2,823	2	66 45
2,726	2 and 3	122 50	2,837	2 and 3	33 02
2,730	3	16 42	2,840	2	16 70
2,735	3	16 59	2,846	2	16 66
2,739	2	16 67	2,847	2	33 23
2,755	2	33 30	2,855	2 and 3	66 61
2,771	2	33 36			
2,792	2	16 50			
2,805	2	16 66			
Total 1897	.....	$603 14	Total 1898..	..	$665 54

School Indemnity Lands.

On February 14th, 1893, the State Board of Education appointed B. F. Hampton, Esq., of Gainesville, Fla., agent to select School Indemnity lands due the State under act of Congress of February 26, 1859, and afterwards the board entered into contract with Mr. James M. Graham, of Alachua county, Florida, to sell him all lands approved to the State under the selection of B. F. Hampton, at the rate of one dollar and twenty-five cents an acre. The board has not been put to any expense in making these selections, and has not paid any commissions for the work.

The contract made with Messrs. Graham and Hampton, is as follows:

State of Florida,
Leon County.

This contract made and entered into this 25th day of April, A. D. 1393, by and between Henry L. Mitchell, Governor; William B. Lamar, Attorney-General; John L. Crawford, Secretary of State; Clarence B. Collins, State Treasurer, and William N. Sheats, Superintendent Public Instruction, as officers and members of the State Board of Education of Florida, parties of the first part, and James M. Graham, by his attorney in fact, Benjamin F. Hampton, party of the second part, witnesseth:

That the said parties of the first part hereby agree to sell to the said party of the second part, his heirs, administrators, executors and assigns, all the school indemnity lands now due and owing to the State of Florida by the United States, under the act of Congress of February 26th, 1859, including all lands now selected under said act, and not yet approved by the Department of the Interior, at one dollar and twenty-five cents ($1.25) per acre, and to make to him or such persons as he may designate, deeds thereto, upon the payment of such sum of ($1.25 per acre. It is expressly understood that the said James M. Graham hereby agrees and obligates himself to purchase *at the price named, all the lands found to be due* and owing to the State, under the said act of Congress of February 26th, 1859, when the same have been approved, and in order to indemnify the said Board against loss by his failure or refusal to carry out the conditions of this contract, the said Graham has deposited $1.500 with the State Treasurer, which said amount, in event of his failure or refusal, as above set forth, he agrees shall be forfeited to the Board, otherwise the same shall be accepted by the said Board in its final set-

tlement with the said James M. Graham as a part of the purchase money mentioned herein.

In witness whereof, we have hereunto set our hands and seals in the city of Tallahassee, Florida, this 25th day of April, A. D. 1893.

HENRY L. MITCHELL, Governor.
[Seal State Board of Education.]
JNO. L. CRAWFORD, Secretary of State.
CLARENCE B. COLLINS, State Treasurer.
W. B. LAMAR, Attorney-General.
WM. N. SHEATS, State Supt. Pub. In.
JAMES M. GRAHAM, by B. F. Hampton, Attorney in Fact.

Seminary Lands.

Amount on hand January 1, 1897		30,755.94
Amount Sold in 1897	217.32	
Amount Sold in 1898	120.28	337.60
Balance on hand January 1, 1899		30,418.34

List of Seminary Land Sold during the Years 1897 and 1898.

No. of Entry.	Acres.	Amount.	No. of Entry.	Acres.	Amount.
2,882	57.00	$71 25	2,925	80.22	$72 20
2,898	40.08	50 10	2,935	40.06	50 10
2,900	80.16	80 16	Total 1898	120.28	$122 30
Total 1897	177.24	$201 51			

List of Seminary Lands Sold under the Provisions of Sections 449 to 453, Revised Statutes, during the Years 1897 and 1898

No. of Entry.	Acres.	Amount of Sale.	Cash Paid.
2,867	40.08	$50 10	$33 40

RECAPITULATION OF SALES IN 1897 AND 1898.

1897.	SWAMP.			INTERNAL IMPROVEMENT.			SCHOOL.			SEMINARY.		
	Acres.	Amount of Sale.	Cash Paid.	Acres.	Amount of Sale.	Cash Paid.	Acres.	Amount of Sale.	Cash Paid.	Acr's.	Am't of Taxes.	Cash Paid.
Cash Entries	6,311. 52	$1,933 98	$1,933 98	3,304. 17	$3,050 63	$3,050 63	8,976. 69	$6,365 06	$6,365 06	177. 24	$201 51	$201 51
Installment Entries under Section 449 to 453, R .S.				1,010 76	1,283 53	428 29	957. 55	1,199 47	503 98	40. 08	50 10	33 40
Total Sales, 1897	6,311. 52	1,933 98	1,933 98	4,314, 93	4,334 16	3,478 92	9,934. 24	7,564 53	6,869 04	217. 32	251 61	234 91
Amount collected under installment Entries of previous years						641 00			603 14			
Total Cash, 1897	6,311. 52	1,933 98	1,933 98	4,314. 93	4,334 16	4.119 92	9.934. 24	7.564 53	7,472.18	217. 32	251 61	234 91
1898.												
Cash Entries	2,819. 03	889 45	889 45	1,572 71	1,999 44	1,999 44	3,386. 22	2,664 43	2,664 43	120. 28	122 30	122 30
Installment Entries under Sections 449 to 453, R. S.				680. 83	851 05	284 36	761. 44	931 78	307 96			
Total Sales, 1898	2,819. 03	889 45	889 45	2,253 54	2,850 49	2,283 80	4,147. 66	3,596 21	2,972 39	120. 28	122 30	122 30
Amount collected under Installmant entries of previous years						490 58			665 54			
Total Cash. 1898	2.819. 03	$889 45	$889 45	2,253. 54	$2,850 49	$2,774 38	4,147. 66	$3,596 21	$3.637 93	120. 28	$122 30	$122 30

Vacant United States Land in Florida.

On July 1st, 1894, the Commissioner of the General Land Office at Washington, D. C., kindly prepared and furnished this office with total number of acres of land by counties that are open to homestead entry in the State of Florida, and Hon. W. G. Robinson, Register of the United States Land Office at Gainesville, Elorida, has, with considerable trouble revised the list, so as to show the number of acres open to homestead entry in the different counties, July 1st, 1898. The following is such list:

Gainesville, Florida, Land District.

Counties.	Area in Acres.	Counties.	Area in Acres.
Alachua	51,393	Leon	3,305
Baker	3,498	Levy	20,616
Bradford	1,478	Liberty	.....
Brevard	46,932	Madison	5,867
Calhoun	51,428	Manatee	17,361
Citrus	25,107	Marion	112,111
Clay	16,783	Monroe	21,856
Columbia	4,600	Nassau	3,973
Dade	55,140	Orange	43,861
DeSoto	112,617	Osceola	8,978
Duval	1,346	Pasco	5,720
Escambia	5,557	Polk	27,582
Franklin	.....	Putnam	22,928
Gadsden	7,786	St. Johns	10,799
Hamilton	3,800	Santa Rosa	103,500
Hernando	5,319	Sumter	1,208
Hillsborough	3,545	Suwannee	768
Holmes	781	Taylor	102,797
Jackson	35,052	Volusia	18,083
Jefferson	3,144	Wakulla	.....
Lafayettte	34,607	Walton	206,260
Lake	57,348	Washignton	185,730
Lee	142,229		
		Total	1,592,793

The field notes ot the exterior lines of what is known as the "Everglades," have been procured from the Surveyor-General of Florida, and sent to the General Land Office at Washington along with quite a lot of written testimony as to

the character of the "Everglade" country. The meanders of the exterior lines of other tracts of unsurveyed lands have been sent to Washington also, with requests for patents to the State for all lands due the State under the Act of Congress of September 28, 1850. A good deal of correspondence relating to the adjustment of conflicts between the State and the United States, as to land entries, has also passed between the State Land Office and the General Land Office during the past two years.

If nothing happens to prevent the issuing of them, the State will receive from the General Land Office very soon patents for the Everglads and other unsurveyed lauds; all of the work necessary to effect this settlement has been done by the present incumbent, at the least possible expense to the State.

The cost of copies of the field notes has been the only expense the Internal Improvement Fund has been put to in this matter. The proving of the swampy character of the lands, and the procuring of the patents, are the work of agents appointed for those purposes many years ago.

The issuing of deeds and other instruments of writing relating to the conveyance of lands by the State Land Office, is a small part of the real labor. The correspondence relating to land is as great as it ever was in the past, as is indicated by the letter books, which contain letters relating principally to lands.

As time passes, the records of the State Land Office become more and more valuable. When and how lands were conveyed to the State by the United States, and when and in what manner disposed of by the State, are facts that interest the owners of the lands now, and also those who desire to purchase real estate, and wish to be satisfied as to legality of title before paying for it.

A set of books have been purchased, and the actual work begun on them, and when completed, parties can get from this office full information as to any particular tract of land in Florida. The books will show whether the land is now United States or State land, if disposed of by either, to whom conveyed, date of conveyance and date of issuing of patent or deed, whether the land was School, Seminary, Internal Improvement, Swamp, Swamp Indemnity, or School Indemnity land, and also full information relating to Spanish Grants, Railroad, Canal and Drainage Grants.

It is very important that the State Land Office should know what land is now vacant United States land, and also should be informed at the end of each month of all Homstead, Pre-

emption and Cash entries made during the month, as well as all final receipts issued during the month from any cause.

I respectfully request that the Commissioner of Agriculture be authorized by a statute to that effect, or by direction of the Trustees of the Internal Improvement Fund, to employ such clerical aid as he may deem necessary, to furnish all the information relating to United States land to be had from the Gainesville Land Office, so as to put the books above mentioned in such a condition, that any person of ordinary intelligence can take one of these books and ascertain at a glance the true status of any tract of land in the State.

If these books were posted as it is intended they should be, all illegal tax sales could be corrected, and the title to lands often cleared of irregular tax sales.

Even with the information already obtained from the Gainesville office, we have been enabled to correct hundreds of illegal tax certificates covering thousands of acres of land.

LANDS GRANTED TO THE STATE OF FLORIDA BY THE UNITED STATES UNDER THE PROVISIONS OF ACT OF CONGRESS OF MAY 17, 1856.

The records of the General Land Office at Washington, D. C., show that up to July 1st, 1894, there had been patented or approved to the State of Florida to aid in the construction of certain railroads under the provisions of said Act of Congress of May 17th, 1856, 2,080,938.95 acres of land.

These lands are not swamp or overflowed lands, but are the odd numbered sections lying within six and fifteen miles of the line of certain railroads; the roads getting the benefit of this grant were the lines that run from Pensacola to Jacksonville, from Pensacola to the Alabama line, from Fernandina to Cedar Keys, and from Waldo to Tampa, known at the time of the approval of the land to the State, as the Alabama and Florida Railroad, the Pensacola and Georgia Railroad, the Florida Atlantic and Gulf Central Railroad, the Florida Railroad, etc.

There are no patents or deeds from the State to the several railroads who received these lands, and no evidence of any conveyance by the United States to the State, except lists showing full description, now on file in the State Land Office at Tallahassee, and at the United States Land Office at Gainesville, Florida. The railroad companies or corporations that received these lands have disposed of them long ago. A great portion of the lands granted under this Act of Congress of May 17th, 1856, were sold by the railroad companies themselves, or by trustees appointed for such purpose in 1859 and 1860.

For the protection of persons who have purchased these lands either from the railroad companies, from trustees of the railroad companies or their assigns, some instrument of writing showing the title that the railroad held in the lands at first, should be placed on record in every county where the lands lie.

The disposition of these lands were never vested in the trustees of the Internal Improvement Fund of Florida, as were the lands granted under Act of Congress of September 4, 1841, known as the Internal Improvement Lands proper, and those granted under Act of Congress of September 28, 1850, known as Swamp and Overflowed lands; therefore the Trustees have no right to make the conveyance, neither has any law ever been enacted authorizing the salesman of State lands or the Governor to make any disposition of them; therefore I request your Excellency to call the attention of the

Legislature to this matter, and request that an act be passed or joint resolution adopted, that will fully protect all purchasers of these lands. Such a law could be passed in a few lines, and the Commissioner of Agriculture, with the proper clerical assistance, could soon prepare and have put on record in the several counties such a conveyance as would show a clear chain of title from the United States to the State, and from the State to the land grant companies or their assigns.

Such action could not affect any rights of the railroads that received the grant. The land was properly earned by them and long since disposed of, and it is only to protect the present owners of these lands, and to show from what scource the title was originally acquired, that the suggestions are made.

Lands Sold Under Chapter 4011, Laws of Florida.

Below will be found a report as to what was received by the Commissioner of Agriculture from January 1, 1897, up to and including May 17, 1897.

1897.	
January, 42 Deeds from No. 3106 to 3148 inclusive	$ 687 71
February, 39 Deeds from No. 3149 to 3187 inclusive	496 62
March, 49 Deeds from No. 3188 to 3236 inclusive	1,133 55
April, 44 Deeds from No. 3237 to 3280 inclusive	635 92
May, 27 Deeds from No. 3281 to 3307 inclusive	346 42
Total	$ 3,300 22

All of the money mentioned above was deposited with the State Treasurer before the deeds were sent out.

As much of what was said in the report to the Governor, January 1, 1897, is still pertinent to the subject of Tax Sale Certificates and Tax Lands it is reported here.

The price received generally for these Tax Sale lands has been the amount of taxes for the year certified to the State, with interest to date of purchase, at the rate of 25 per cent. per annum, costs, and all subsequent tax sales with interest at the same rate on such subsequent sales. There has been some deviation from this rule in some cases, such as large purchases, and sometimes when the taxes and costs were excessive, or the lands were sold through mistake or ignorance on the part of the owner. The above amount does not include all the money received from the sale or redemption of Tax Certificates at the office of Commissioner of Agriculture, while the Commissioner only controlled the sale of lands certified to the State during the years 1892 and 1893. Often parties wished to redeem lands sold for taxes prior to 1892 or 1893, and would write to him for cost of redemption or purchase. Such letters were always answered direct, without reference to the Treasurer or Comptroller, and the moneys, if any received, handed to the proper officer, and the tax certificates cancled and transferred, and sent to the partfes writing for them.

The Commissioner has had clerks employed to look up lands that are, or were not, subject to taxation, and the tax certificates covering such lands cancelled, by such work hundreds of illegal or improper certificates have been cancelled, and the cloud that would rest upon the title to thousands of acres of land removed.

While upon the subject of Tax Sales, the opportunity presents itself of calling the attention of your Excellency and the

Legislature to the manner of paying Tax Collectors. A good business man pays his agent, the larger or the sole commission on amounts collected by such agent; with the State, a different rule has prevailed, for real estate upon for which taxes are not paid, and which reverts to the State, or as is called "bought in by the State," a commission of 5 per cent. is paid on the uncollected taxes, and only 1 per cent. is paid if the amount of taxes collected exceed a certain sum; in addition to this 5 per cent. for real estate bought in by the State, the collector receives 25 cents for each tax certificate issued to the State. The Tax Collectors are not paid too much; but it would seem the better policy to pay more for money actually collected, and less commission on that not collected. The collectors themselves would prefer to be paid for money received. In many counties the compensation received from the State is not sufficient, and they are not paid what they are worth, or would be paid by individuals or corporations for like services.

Report of State Chemist.

To His Excellency, WILLIAM D. BLOXHAM,
Governor of the State of Florida.

SIR—In accordance with Sec. 908, Revised Statutes, I have the honor to submit herewith my annual report.

This laboratory was primarily established for the analyses of commercial fertilizers, sold to citizens of this State, and, under our law, these fall under two heads: the first are those which come under Section 895, being samples which are taken by the State Chemist, or by his assistant, wherever they are found, in the factories, warehouses, stores, or in the hands of consumers, and which we designate as *Official Samples*. The other class are those taken by the purchasers, themselves, under Section 903 of the Revised Statutes, which provides that "Any person purchasing any fertilizer from any manufacturer or vendor in this State for his own use, such person being a citizen of the State, may submit fair samples to the Commissioner of Agriculture," etc. These samples we call special samples.

Under Sec. 895, I have made and published, as shown by the "Monthly Bulletin" for September, 1898, of official samples one hundred and seventy-nine, which embrace samples taken by myself, or the Assistant Chemist and Inspector of Fertilizers, from points all over the State where fertilizers are sold or stored. An examination of these results show that 20 per cent. of these are below the manufacturers' guarantees in one ingredient, 2 per cent. are below the guarantees in two ingredients, and 1 per cent. below in all three ingredients; and that 7 per cent. are scarcely up to the guarantees. Of the above 14 per cent. were below the manufacturers' guarantee in potash; 8 per cent. were below in ammonia and 4 per cent. below in phosphoric acid. The tabulated list of these analyses will be found at the end of this report, marked table A. Since the issue of that Bulletin, I have made analyses of thirty-two official samples, and twenty special samples, fifty-two analyses, which are shown in table B.

The determination of the moisture, ammonia, potash, and phosphoric acid in its two forms of available and insoluble, (which really involves also the determination of the total phosphoric acid), in a complete fertilizer takes the time of a chemist two days, and would ordinarily be worth twenty dol-

lars; for this work, however, Section 903, Revised Statutes, provides that the Commissioner of Agriculture may charge a fee of two dollars; following my reappointment as State Chemist, and the appointment of an assistant to the State Chemist, who was a practical chemist, and who would work with me in the laboratory all the time, the Commissioner of Agriculture exercised the discretion allowed him by the wording of the law, and waived the payment of the nominal fee, thereby permitting any citizen of Florida, who was a purchaser of fertilizer for his own use, to have an analysis free of charge, provided he would take a fair sample, in the presence of two disinterested witnesses, from original packages, and have the samples sealed and sent to him.

This liberal action has proven most satisfactory to purchasers, and has not been found to work any injustice to any manufacturer; and as it has become generally known, more consumers are availing themselves of its advantages. Since its adoption I have made ninety-six analyses of special samples of commercial fertilizers, cotton seed meals, ashes, and fertilizer materials for the following persons: A. Greenleaf, Floral City; A. W. Street, Ormond; Wm. L. Neeld, St. Petersburg; Jesse Green, Crawford; T. B. Anderson, Palatka; E. B. Bailey, Monticello, P. J. Hawley, Hastings; J. H. Curry, Tampa; Dr. E. S. Crill, Palatka; Vertrees & Co., Palatka; W. A. Bours & Co., Jacksonville; Wilson & Toomer, Jacksonville; P. Houstoun, Leon county; R. D. Hoke, Jensen; J. M. Brownlee, Starke; W. A. Merryday, Palatka; J. T. Carleton, Arcadia; A. G. Thompson, Jacksonville; C. T. Carroll, Monticello; D. S. Chase, South Lake Weir; Clarence Moore, Melrose; A. L. Perry, South Lake Weir; J. L. Young, Plant City; A. C. Berry, Brents; P. B. Byrd, Drifton; Chase & Co., Sanford; E. O. Painter & Co., Jacksonville; L. N. Crigler, Bartow; F. Kramer, Leesburg; E. B. Cooper, Grand Island; W. D'C. Kessler, Pensacola; E. H. Mote, Leesburg; A. L. Wilson, Quincy; G. W. Saxon, Tallahassee; Frank H. Davis, Apopka; H. W. Remmers, DeLand; C. R. Tysen, Jacksonville; C. W. Zaring, Jacksonville; Bruce Turton, Jacksonville; J. D. Price, McIntosh; G. P. Ide, Jacksonville; F. E. Ohlinger, Winter Haven; W. G. Powell, Jacksonville; G. E. Cannon, Gainesville; T. A. Carroll, Gainesville; T. M. Weir, Tampa.

The Commissioner of Agriculture, desiring to extend as much as possible the usefulness of this department, suggested that, as opportunity offered, such analyses of soils be made as would be found to benefit many persons in a community; the results of such soil analyses as we have found time to make,

together with the names of the senders, will be found in their proper place in this report.

At the request of the citizens of Kissimmee, through Mr Vans-Agnew of "The Kissimmee Valley Gazette," I made an analysis of the water supply of the city of Kissimmee, and at the request of Mr. F. G. Baldwin, of Lake Maitland, an analysis of the water on his premises, which he suspected contained the germs of typhoid fever, and caused the illness of his son. These were considered of general importance to the communities from which they came, and no charge was made in any instance. The results are shown elsewhere.

In the September "Monthly Bulletin" for 1897, being the last issue for that year, I published the following, which fully explains itself:

Bright Cotton Seed Meals.

"I have found at several points in the State that bright cotton seed meal is being offered for sale, chiefly through brokers, 'without analysis.'

"This is done in such a manner as to endeavor to create the impression that it is just as good as though the analysis *was guaranteed*, and the buyer saves the twenty-five cents per ton which the State collects on all fertilizers.

"A sample recently sent on from Palatka was found by analysis to contain 5.10 *per cent.* ammonia; pure cotton seed meal should not contain less than 8½ *per cent.* ammonia, and the average for this season runs above 9 *per cent.*

"If a ton of cotton seed meal which contained 9 *per cent.* ammonia is worth $21.60, a ton of meal which contained 5.10 *per cent.* ammonia would be worth $12.24.

"Instead of saving twenty-five cents per ton, the buyer of the adulterated cotton seed meal would be out just $9.36 on every ton purchased under the above conditions.

"I have been at some trouble, and several days' work, to find out the nature of the adulterants used, and in the sample under consideration, which I have compared with a sample of pure meal obtained the following results:

	Adulterated Sample.	Pure Meal.
Ammonia	5.10%	9.11%
Ash	4.33%	5.92%
Oil	14.75%	14.25%
Crude fibre, in oil free, dry state	18.25%	7.80%

"These results show clearly that the sample is adulterated with some vegetable refuse, rich in cellulose, but poor in, or free from, nitrogenous compounds, and containing less ash than

pure meal. This meal was probably adulterated with finely ground corn cobs.

"Meals from Memphis, Tennessee, have been found to be more frequently adulterated than any others, and while all meals from that point may not be adulterated, it would be well to insist upon an analysis of any which come from there. See that the guarantee and the commissioner's stamp is on every sack.

"I will gladly give prompt attention to samples sent on for analysis."

As I have stated, the above sample came to me from Palatka. I have since been informed by one of the largest dealers in Palatka, that the goods, themselves, never came into the State, but that the publication in the "Monthly Bulletin" had the effect of making many buyers cautious about buying meals in Palatka; while the dealers were really protecting themselves and their customers from fraud, by insisting upon having an analysis of the goods before they would let them come into the State.

In the issue of the "Monthly Bulletin" for May, 1898, I published the following:

ANALYSIS OF THE VELVET BEAN.

Moisture at 212° F.,	10.76 per cent.
Crude fibre	8.50 per cent.
Fat	4.74 per cent.
Ammonia	4.42 per cent.
Equivalent to nitrogen	3.64 per cent.
Equivalent to crude protein	22.75 per cent.

ANALYSIS OF THE ASHES.

Moisture at 212° F.,	7.24 per cent.
Potash, (K_2O)	6.72 per cent.

Also the following:

THE VALUE OF THE ASHES OF THE PALMETTO ROOT AS A FERTILIZER.

"The following will prove interesting to many people in Florida:

"LEESBURG, FLA., June 14, 1898.

"W. A. Rawls, State Chemist, Dear Sir: Please, by early mail, give me the per cent. of potash in the ashes of the palmetto root. The roots were grubbed from high hammock land. Very respectfully,

"J. H. R."

REPLY.

"TALLAHASSEE, FLA., June 17, 1898.

"Mr. J. H. R., Leesburg, Fla., Dear Sir: Replying to your inquiry as to the value of palmetto roots for the potash which the ashes contain, some experiments conducted in this laboratory showed that a ton of green palmetto roots contained 64.30 per cent. of water, and 35.70 per cent of dry fibre; the proportion of ash to the green root was found to be 0.92 of one per cent. or 18.4 pounds to the ton. 18.4 lbs. of ash contained 4.49 lbs. of potash, which, at five cents a pound, would be worth something like twenty-two cents.

"You can readily see, from these results, that it would not pay to grub palmette roots for the potash contained in the ashes.

Yours truly,

"W. A. RAWLS, S. C."

In the June issue of the "Monthly Bulletin" the following:

VALUE OF MUCK ASHES.

"Since the occurrence of the muck bed fires, in various parts of Florida, I have had a number of samples of muck ashes sent in for analysis.

"Of course these ashes contain no ammonia, all this having been driven off by fire. As the muck consisted of decayed roots, leaves and other vegetable organic matter, together with sand and other insoluble material, the bulk of the ashes would be made up principally of these insuluble materials, with traces of phosphoric acid, lime, magnesia, etc., and small quantities of potash, and their value would depend upon the amount of potash found in them.

"The determinations of a number of samples, from different localities, showed an average of 0.16 per cent. of potash (K_2O.), and their commercial value, under our schedule of valuations, exclusive of any allowance for freights, sacks, etc., would be sixteen cents per ton."

In the "Monthly Bulletin" for September, 1898, the following:

HARDWOOD ASHES.

"In order to be absolutely safe from fraud in the purchase of hardwood ashes, it is necessary to send a sample of every lot purchased to the State Chemist for analysis.

"Call in two disinterested witnesses, take a fair sample of the whole lot, let one of the witnesses seal the package, and send it by mail or express to the Commissioner of Agriculture, and he will have the State Chemist make the analysis, and send you the result free of cost.

"Four samples taken in Jacksonville within the past two weeks analyzed as follows: In Potash (K^2 O) Soluble, 0.49 per cent., 2.74 per cent., 1.18 per cent., 1.49 per cent.; all these guaranteed by the shippers to contain over 6 per cent. potash."

In this report I shall endeavor, more fully than heretofore, to explain the workings of our fertilizer laws, and to give somewhat in detail the reasons for the creation and continuance of this department.

During the year 1898, the U. S. Department of Agriculture issued a Bulletin (No. 13 miscellaneous series), which gave a resume of the fertilizer industry of the United States, and on page 20, under "Analysis of Fertilizers and License of Sales" occurs the following:

"All the States east of the Mississippi River, with Missouri, Arkansas, and Louisiana—twenty-nine in number—have laws relating to the inspection and sale of commercial fertilizers. The region subject to this legislation is the fertilizer-consuming region of the country, the remainder of the States using comparatively insignificant quantities. The occasion for this legislation was the fraudulent character of the commercial fertilizers manufactured and offered for sale, the chemical constituents of which were misrepresented or concealed and were of much less value than represented by manufacturers and dealers.

"The laws of the various States with regard to the sale of fertilizers differ only in minor details, and in general are of the following character:

The General System.

"The Secretary of the State Board of Agriculture, or some other State official, is authorized to issue licenses for the sale of fertilizers, upon the payment of a fee for each brand or specified quantity, annually, and the licensee must affix to each package of fertilizer sold, a statement of the chemical analysis of the fertilizer, his own name and address, and the net weight of the package, a copy of said certificate to be sent to the State official, together with a sample of the fertilizer. The State official employs a chemist to analyze samples of fertilizers, and the results of analyses are published, together with statements of the commercial value of the various brands as shown by the quantities of their various components. A regular analysis of each brand of fertilizer is usually made annually, but the State official may authorize anyone to select from any package of fertilizer exposed for sale a small quan-

tity and send the same to him for analysis, to see whether it agrees with the certificate attached to the package.

"The result of the legislation requiring the analysis of fertilizers has been to eliminate fraud from the business, and the farmer may now be sure that he is buying what the fertilizer is represented to be, his main concern being that he should buy the fertilizer that is chemically adapted to the requirements of his soil and crop."

The foregoing is followed by an abstract of the fertilizer laws of each State, and a careful comparison of all shows that in all essential points the fertilizer law of Florida is among the very best that has been devised.

In this State we do not analyze manufacturers' samples. The official samples are taken either by the Assistant Chemist, who is also Inspector of Fertilizers, or by the State Chemist himself, who goes all over the State, into the warehouses of the transportation companies, the dealers and agents handling fertilizers, the factories of the manufacturers, taking samples of the goods wherever he finds them exposed for sale, and in many instances in the hands of consumers. These samples are analyzed, the dealers, or consumers, are promptly notified by mail, and the results are also published in the "Monthly Bulletin," so that they reach the people promptly, and not annually, as is the case in many States, where an annual bulletin only is published.

Commencing in July, 1897, and ending December 31, 1898, I have traveled 8,674 miles, visiting the principal towns and stations along the lines of railroad transportation in the State. I have made two trips as far south as Miami on the East Coast; one as far as Braidentown, three to Tampa, one to Punta Gorda, and another as far as Arcadia, taking in as many intermediate points as possible, and have visited Pensacola and points along the line of the L. & N. R. R. as often as practicable. While at Jacksonville, Palatka and other distributing points, I have made as frequent trips as were considered necessary to properly look after the large amounts of fertilizers which are constantly passing into the State through those places; this duty having been undertaken by me solely for the reason, that for the small salary allowed by the last Legislature for the Assistant Chemist and Inspector of Fertilizers, no man could have been obtained who would have been willing to fill both positions, since no appropriation was made for traveling expenses. All traveling expenses have been paid by me out of my salary.

As the salary of the State Chemist, the Assistant Chemist, and the expenses of the laboratory, are paid out of the receipts

from the inspection of fertilizers, this department is maintained at no cost to the tax-payers of the State, and at no cost even to the consumers of fertilizers; and while the latter could well afford to pay the additional twenty-five cents per ton for the protection which this department gives to them, they do not pay even this small sum. To demonstrate this clearly, I will use for illustrations one of a popular brand of fertilizers, which is manufactured in New York and sold largely in the eastern and southern parts of the State—Mapes' Fruit and Vine.

The twentieth annual report of the Connecticut Agricultural Experiment Station, pages 148 and 149, gives the price of Mapes' Fruit and Vine fertilizer, at Mapes' branch, in Hartford, Connecticut, at $38.00 per ton. Mr. Tysen, their agent in Florida, gives as the price in Jacksonville, Fla., in his published circulars, $38.00 per ton; if sold in Savannah, Georgia, the price would be $38.00 per ton, and it would be delivered at the port of Mobile, Alabama, for $38.00 per ton. Now, in Connecticut there is no inspection fee of so much per ton, but a license fee of $10.00 for each fertilizing ingredient, irrespective of the amount sold. In Georgia where the sales of fertilizers have reached 400,000 tons, the inspection fee is ten cents per ton; in Florida it is twenty-five cents per ton, and in Alabama fifty cents per ton. The inspection fee varies, but the price of the fertilizer remains the same. The manufacturer pays the small fee of so much per ton, and the goods cost the consumer no more on account of it, just as the manufacturers of proprietary medicines and other articles are paying the tax levied by the U. S. Government on all their goods; but Hood's Sarsaparilla still costs the consumer $1.00, and Tutt's pills are still twenty-five cents. The fertilizer law of Alabama provides a penalty for any attempt, directly or indirectly, to add the price of the inspection fee to the price of any commercial fertilizer sold in that State.

Again, the Connecticut Experiment Station report, above quoted, gives to Mapes' Fruit and Vine fertilizer a valuation of $26.32 per ton; that is, they say that the materials which would make a ton of fertilizer to analyze the same as Mapes' Fruit and Vine could be purchased at a seaport in Connecticut for $26.32; now, if a single ton could be bought for this amount in open market, they who buy many thousands of tons must get lower figures, and when they get below $20.00 per ton, namely to $19.00 per ton, and sell for $38.00, their profit is one hundred per cent., less freight to port of delivery, and agent's commission. So it can readily be seen that the inspection fee of twenty-five cents plays no part in the price.

In addition to the foregoing, I have made analyses for the following persons: S. P. Shepherd, Palm Springs, muck; Thos. Hind, Georgetown, Florida moss; J. B. Miller, Lady Lake, clay and water; Judge R. F. Taylor, Tallahassee, clay; Thos. Savage, Kendrick, soft phosphate; Edward Ludlow, Jacksonville, rocks; Jere S. Smith, Jacksonville, rock; J. A. Hansbrough, Tampa, clay; J. V. Burke, Ocala, phosphate rocks; W. N. Camp, Albion, phosphate rocks; Geo. H. Wright, Orlando, velvet beans; Angus M. Smith, Jacksonville, clay and rocks; J. H. Frier, Alafia, muck ashes; J. T. Gailey, Eagle Lake, muck ashes; Bruce Turton, Jacksonville, screenings; J. T. Hilliard, Melbourne, rocks; J. R. Powell, Eldridge, rocks; J. T. Wilson, Leon County water; E. S. Buckingham, Pensacola, marl; E. L. Carney, South Lake Weir, muck; G. H. Gibbon, Winter Haven, muck; McCaskell Bros., Wyoma, clay; J. T. Alsabrook, Lisbon, coffee; M. E. VanNess, Arlington, phosphate rock; J. E. Ingraham, St. Augustine, rocks.

Besides the routine correspondence of reporting upon all analytical work, many letters have to be answered, which take no inconsiderable time; these frequently interest many people besides the persons to whom they are addressed, and, in order to convey some idea of the nature of this work, I shall insert some letters which I have written in reply to questions received. These are taken at random from our letter book, and are only some of hundreds on file.

Hon. L. B. Wombwell,

Commissioner of Agriculture.

Sir—Replying to letter of Hon. S. P. S., Palm Springs. In reply to first question (as to muck), "What would be good to compost it with?"

The great consensus of opinion among the many who have experimented with muck is that in its raw state it is of doubtful value; some say that "it is not worth hauling;" this is especially true when it dries in hard lumps, as they often take many years to disintegrate.

This muck consists of about one-half water, most of the balance being organic matter, the remains of decayed vegetable fibre from aquatic and semi aquatic plants, etc. Ammonia is its valuable element. Unfortunately this ammonia is locked up in its most inaccessible forms, as a plant food, since it is held by humic and other acids, resulting from the decay of vegetable fibre, and the practical question is how to make this ammonia available to the growing plants, without thoroughly

pulverizing and treating the muck with solvents, etc., and spending more money on it than it would be worth.

I am able to suggest the following as one method which has given good results. Let the muck be thoroughly air-dried, under cover, which will get rid of about three-fourths of the water it now contains, then use it, as much as possible, as an absorbent for the waste materials from the stable, the kitchen, around privies, etc.; then, in order to make a complete fertilizer, there must be added phosphoric acid and potash; how much of each would depend somewhat on the crops to be grown, but from three to five hundred pounds of high grade sulphate of potash, and the same quantity of superphosphate to each ton of the muck, would produce a good all around fertilizer.

Answering the second question. The percentage of ammonia would increase in proportion to the dryness of the muck.

Respectfully submitted,

W. A. Rawls,
State Chemist.

Hon. L. B. Wombwell,
Commissioner of Agriculture:

Sir—Referring to the letter of Mr. W. P. N., St. Petersburg, Fla.:

The first sample we analyzed for him looks very much like pebble phosphate; it may be the fossilized excrements of birds, or it may have become mixed with the excrements of birds, thousands of years after its formation; but the percentage of phosphoric acid being greater in this than the last sample, can be easily explained, without entering upon the mooted question of how and when these phosphates were formed, or whether they were formed at two or more entirely different periods, from entirely different sources, and by entirely distinct processes. Suffice it to say that the highest authorities differ on these questions, and the most distinguished are wearing out their lives trying to reconcile the many theories on this subject.

The last sample contained moisture, ammonia and organic matter, running to a good percentage. Now all these and other matters, as well as some soluble phosphoric acid, had leaked or washed out of the first sample, and of course the phosphoric acid which was left ran higher. I will illustrate. If we mix 25 per cent. of corn, with 75 per cent. of peas, then

take all the peas out of the mixture, all of what is left is corn; the percentage of corn has increased from 25 to 100 per cent. so in the first sample, when other matters had leached and washed out and left only phosphoric acid, and much of that in a form which would not leach and wash out, that is *insoluble*, then the percentage of phosphoric acid runs higher, especially the insoluble phosphoric acid, which the leaching least affects.

The first sample contains only phosphoric acid as a fertilizing material (and lime); the second contains a good percentage of ammonia, in addition to phosphoric acid, largely in soluble form, and, with the further addition of potash, will make a complete fertilizer.

Respectfully submitted,

W. A. RAWLS,
State Chemist.

Hon. L. B. Wombwell,
Commissioner of Agriculture:

DEAR SIR—Referring to sample of earth, and sample of water, sent on for analysis, by Mr. L. B. Miller, Lady Lake, Fla.:

The earth is a clay; it was formerly at the surface, and supported a very rank vegetation; the roots of plants and decayed vegetable matter remained in it, and it contained enough iron to unite with the tannin in the vegetable matter, and form an ink, which has communicated its color to the earth, hence it is black.

This earth contains a considerable amount of organic ammonia; the water filters through this earth, and takes up enough ammonia to render it unfit for use, and no practical filtering or boiling will render it fit to use, either for man or beast.

Respectfully submitted,

W. A. RAWLS,
State Chemist.

Hon. L. B. Wombwell,
Commissioner of Agriculture:

SIR—Referring to sample of ochre submitted for examination:

This seems to be a fair quality of ochre; but the only way to determine the commercial value of this class of earths is to send samples to dealers, who make practical tests as to its oil absorbing power, and its ability to cover surface. These ma-

terials are mined in foreign countries where labor is cheap, and where transportation is available; it is rarely found practicable to mine and deliver them into commercial centres along long lines of railroads.

Yours very truly,

W. A. RAWLS,
State Chemist.

Mr. H. von L., Earleton, Fla.:

Dear Sir—I have just returned from a trip through Eastern and Southern Florida, where I have been inspecting and sampling fertilizers, and find your letter of 31st ult. waiting reply.

We will suppose that you wanted to mix a fertilizer to contain say 7 to 8 per cent. of available phosphoric acid, 2 to 3 per cent. of ammonia, and 9 to 10 percent of potash (as potassium oxide K_2O, which is the form in which chemists have generally agreed to estimate the latter), and that you wanted to use acid phosphate, cotton seed meal, and high grade potash; and that your acid phosphate analyzes 15.71 per cent of phosphoric acid (P_2O_5); cotton seed meal 9.35 per cent. ammonia, and potash 48.2 per cent. potash (K_2O).

Bearing in mind that per cent. means so many parts in each one hundred, we would say:

1,000 lbs. acid phosphate, multiplied by 15.71 per cent., equals 157.1 lbs. phosphoric acid, in one ton,

and 2,000 lbs. : 157.1 lbs. : : 100 per cent. : x = 7.85 per cent. phosphoric acid.

600 lbs. cotton seed meal, multiplied by 9.35 per cent., equals 56.1 lbs. ammonia in one ton; equals 2.8 per cent. ammonia. 400 lbs. potash, multiplied by 48.2 per cent., equals 192.8 lbs. potash in one ton, or 9.64 per cent. potash (K_2O).

Now suppose you wanted to increase your per centage of ammonia by the addition of nitrate of soda, and that your nitrate of soda analyzed, say 18.36 per cent. ammonia, and that you wanted to substitute 300 lbs. of nitrate of soda for 300 lbs. cotton seed meal, then you would have

300 lbs. cotton seed meal × 9.35 per cent = 27.75 lbs. ammonia in one ton.

300 lbs. nitrate soda × 18.36 = 55.08 lbs. ammonia in one ton, and 27.75 plus 55.08 = 82.83 lbs. in one ton, or 4.07 per cent.

I mail you under separate cover copy of our "Monthly Bulletin," which you can get regularly if you wish, on application to the Commissioner of Agriculture.

I shall be glad to be of further service to you at any time.

Yours very truly,

W. A. RAWLS,
State Chemist.

Mr. J. V., Bartow, Fla.:

Dear Sir—Replying to your letter of inquiry, the phosphoric acid from Florida phosphate rock is just as available as that from any other material.

In support of this view, which I have always held, I quote from Bulletin No. 35, Hatch Experiment Station, Massachusetts Agricultural College, which summarizes as follows: "The superior value which has hitherto been accorded to undissolved bone meal as a fertilizer, is due solely to the nitrogen which it contains." "As a phosphate fertilizer it yields no better results than mineral phosphates."

And from Bulletin No. 33, season of 1896-97, by Dr. Geo. F. Payne, State Chemist of Georgia, page 37: "We would consider an acid phosphate from phosphate rock, containing a certain percentage of available phosphoric acid, as available, as far as the phosphoric acid is concerned, as a similar amount of available phosphoric acid obtained from bone.

Yours very truly,
W. A. RAWLS.

Hon. L. B. Wombwell,
Commissioner of Agriculture:

Sir—I have completed the analysis of the sample of soil sent on by Mr. J. A. Farnell, Jr., Waveland, Brevard county, and find it to contain as follows: (Results given in table of soils).

As we have no data as to the history of this soil, how it was taken, at what depth, etc., we can only say that it compares favorably with other samples of soil taken in the same section of Florida; it is high in organic matter, carrying a good percentage of ammonia, so far indeed in this respect above the average, that it might seem to have been fertilized with some ammoniate, or with soil from a muck bed.

In sand and insoluble silicates this sample does not run as high as the average Brevard county soils, which is very much in its favor.

In phosphoric acid and lime it goes above many virgin soils, but shows only a trace of magnesia, and in fertilizing, I would recommend that the potash used be in the form of double manure salts (potash and magnesia).

There does not seem to be any reason why this soil should not produce fine crops of tobacco, or any other crop, when properly fertilized.

Respectfully submitted,
W. A. RAWLS,
State Chemist.

Mr. Clarence M., Melrose, Fla.:

My Dear Sir—Yours of 20th ult. awaited my return from a trip in West Florida. Let us figure together a little, for the benefit of our farmer friend, and see where we will come out; and for illustration we will take "Powell's prepared chemicals" as a basis. The analysis was as follows:

Available phosphoric acid, 7.04 per cent.
Insoluble phosphoric acid, 0.25 per cent.
Ammonia, 3.06 per cent.
Potash (K_2O), 8.59 per cent.

To get a valuation for this, refer to the table in the Bulletin, and we have:

Available phosphoric acid, 7.04x80	$ 5 63
Insoluble phosphoric acid, 0.25x20	05
Ammonia, 3.06x2.40	7 24
Potash (K_2O), 8.59x1.00	8 59
Add for freight, bags, handling, etc.	2 60
Value of 1 ton	$ 24 11

In other words, you could buy phosphoric acid, ammonia, and potash enough in any Florida seaport to make one ton of the same grade which they sell in Baltimore for $54.00, for $24.21, at the State Chemist's valuation.

Now suppose you wanted to mix your own fertilizer, accord- to the foregoing formula, or rather according to the percentages there given, you would need of acid phosphate (14 to 15 per cent. phosphoric acid) enough to make 7.04 per cent., or 7 lbs., in every 100 lbs. or 140 lbs., phosphoric acid in every ton, and as each 100 lbs. acid phosphate furnishes 14 lbs. phosphoric acid, you would need as many times 100 lbs. acid phosphate as 14 is contained in 140, or 10 times 100 lbs., or 1000 lbs. acid phosphate.

Cotton seed meal averages about 9 per cent. ammonia; that is there is 9 lbs. ammonia in every 100 lbs. cotton seed meal, and you want 3.06 per cent ammonia—3 lbs. in every 100 lbs., or 60 lbs. ammonia in the ton; therefore you must take as much cotton seed meal as 9 is contained in 60 multiplied by 100 or about 700 lbs., (to be exact 666⅔ lbs.).

For potash you would use high grade sulphate, going to say 50 per cent. potash (K_2O), and to get 8½ per cent. you would want 20 times 8½, or 170 lbs. potash (K_2O), so you would need 340 lbs. high grade sulphate potash.

1000 lbs. acid phosphate, at $10.50 per ton, would be..	$ 5 25
700 lbs. cotton seed meal, at $20.00 per ton, would be.	7 00
340 lbs. high grade sulphate potash, at $50 00 per ton, would be.....	8 50
2040 lbs.....	$ 20 75

To which you must add freight from your nearest seaport.

Don't you think this beats "Powell's prepared chemicals" at $54.00, plus the freight from Baltimore?

Your truly,

W. A. RAWLS,
State Chemist.

NOTE—This party had purchased "Powells prepared chemicals," and I had made an analysis of the material for him.

W. A. R.

Messrs. W. & T., Jacksonville, Fla.:

GENTLEMEN—I have your favor of 2nd, also enclosure from C. F. Carrigues & Co., of New York. Referring to their statement that "the method adopted by your State Chemist, for determining the analysis of nitrate of soda is radically different from that used by Messrs. Stillwell & Gladding of New York," etc. Messrs. Stillwell & Gladding would no doubt be very much surprised to learn that they are using methods for determining nitrogen, radically different from those used by every State Chemist in the United States, since the methods used by your State Chemist are those adopted by the "Association of Official Agricultural Chemists," which includes every chemist in the United States who exercises fertilizer control, as well as most commercial chemists in this country. This part of their letter is false and misleading, and Stillwell & Gladding will tell you so, when you ask them.

The second part of their letter is true, in that they are living up to their contract, as I remember it from your reading it to me when in Jacksonville; you buy it on some "West Coast Analysis," whatever that may be, and not on the analysis of Stillwell & Gladding, or anybody else whom you know; and then, too, the contract allows for variation in what might be called the run of the mine. We see that the product does vary. We made an analysis for C. R. Tysen, sample taken by me October 26, 1898, which ran to 18.36 in ammonia; and it would be much better for them to say this, than to attempt to

throw mud on your State Chemist. As a matter of fact they dont guarantee you any per cent. of nitrogen or ammonia, and they are perfectly safe in saying so; the guarantee is all the other way; you really guarantee to pay for whatever they send you, and if you were to try to make any other kind of contract, you would probably find that you could not do so; as for instance, an analysis by Stillwell & Gladding of each lot.

To sum up the whole situation in a nutshell: We are using the methods in all our fertilizer work which have been adopted by the "Association of Official Agricultural Chemists of the United States," and which are used by every chemist in the United States, for this work; we are doing this work all the time, over and over again. My assistant has worked in the laboratories of Wyatt & Sarbaach, Ledoux, and others, in New York, and elsewhere, and has their unqualified endorsements; and has devoted many years to this class of work. Our work is accurate and correct, and in making such analyses as potash and ammonia salts, we are doing it for your protection, and for the protection of the fertilizer consumers of Florida.

In using these salts, in compounding fertilizers, you must either have a chemical analysis of each lot, or you must allow for variations, which their own contracts allow for, otherwise these variations will show up in your completed fertilizers, just as they have been showing.

With renewed assurances of the highest esteem, I remain

Yours very truly,

W. A. RAWLS,
State Chemist.

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VALUATIONS.

The valuations for the current year have been as follows:

For available, and insoluble, phosphoric acid, ammonia and potash for the season of 1897-98:

Available phosphoric acid, 4 cents a pound.
Insoluble phosphoric acid, 1 cent a pound.
Ammonia (or its equivalent in nitrogen), 12 cents a pound.
Potash, 5 cents a pound.

If calculated by units:

Available phosphoric acid, 80 cents per unit.
Insoluble phosphoric acid, 20 cents per unit.
Ammonia (or its equivalent in nitrogen), $2.40 per unit.
Potash, $1.00 per unit.

With a uniform allowance of $2.60 per ton for mixing, sacks, freight, etc.

A unit is 20 lbs., or 1 per cent in a ton. We find this to be the easiest and quickest method for calculating the value of a fertilizer. To illustrate this, take for example a fertilizer which analyzes as follows:

Available phosphoric acid, 6.39x.80	$ 5 11
Insoluble phosphoric acid, 1.15x20	23
Ammonia, 4.93x2.40	11 83
Potash, 7.11x1.00	7 11
Mixing, sacks, freight, etc.	2 60
	$ 26 88

The above analysis is one of a popular fertilizer manufactured in Jacksonville, Fla., and I am informed that the manufacturer's price is $27.00 per ton, or within twelve cents of the State Chemist's valuation.

Analyses of Soils for R. M. Brown, Cocoanut Grove, Fla.

	No. 1. Saw Grass Palmetto.	No. 2. Clay.	No. 3. Piney Woods Land.	No. 4. Calcareous Rock.
Moisture	6.56	6.54	0.16	9.29
Organic matter and water of combination	11.95	5.53	1.46	2.97
Oxides of iron and alumina	1.40	10.77	1.35	.....
Carbonate of lime	61.07	.....	.....	81.60
Sand and insoluble silicates	19.02	77.16	97.03	6.14
	100.00	100.00	100.00	100.00

No ammonia, no phosphoric acid, no sulphates, no manganese, and no magnesia were present in any of these samples.

I can only say that, from a chemical standpoint, these soils promise very little, except as a base upon which to build; and all of them would, in my opinion, have to be treated with complete fertilizers to make them fertile.

Nos. 1 and 4 consist largely of carbonate of lime; and the organic matter in No. 1 carries no ammonia.

No. 2 consists largely of sand, and No. 3 almost entirely of sand. No. 2 has some "clay" in the form of iron and alumina, but this contains no potash, and even magnesia seems to be absent in all these samples.

	Brevard Co Soil.	Pasco Co. Soil.
Moisture at 212 degrees F	7.72	2.55
Organic matter and water of combination	4.10	2.66
Nitrogen, estimated as ammonia	0.21	0.03
Soluble silica	0.10	0.10
Sand and insoluble silicates	86.73	89.31
Phosphoric acid	0.08	0.75
Oxides of iron and alumina	0.45	4.52
Carbonate of lime	0.59	0.05
Potash, as potassium oxide	0.02	0.03
Magnesia	Trace.	None.
	100.00	100.00

The first of the above was sent by Mr. J. A. Farnell, Jr., of Waveland, Brevard county, Fla. The second by Hon. M. H. Mabry, of Dade City.

Analyses of Soils for Mr. Oliver P. Bingham, West Palm Beach, Fla.

	Sample on Top.	Sample six inches deep.	Sample eighteen inches deep.
Moisture in air dried soil	1.400%	0.988%	0.803%
Sand and insoluble silicates	74.430 "	76.280 "	60.300 "
Soluble silica	0.035 "	0.045 "	0.020 "
Oxides of iron and alumina	0.846 "	0.884 "	0.603 "
Carbonate of lime	14.839 "	13.589 "	30.410 "
Phosphate of lime	0.646 "	0.618 "	0.675 "
Carbonate of magnesia	7.287 "	6.804 "	6.216 "
Organic matter and water of combination	0.517 "	0.792 "	0.973 "
Sulphuric acid	Trace.	Trace.	Trace.
Chlorine	None.	None.	None.
Potash	None.	None.	None.
Ammonia	Traces.	Traces.	None.
	100.000	100.000	100.000

Analyses of Soils for Hon. B. F. Whitner, Orange County.

	Soil No. 1	Soil No. 2	Subsoil No. 2
Silica and insoluble silicates..	82.570%	79.745%	60.100%
Soluble silica.....	0.070 "	0.065 "	0.035 "
Iron and alumina oxides.....	6.310 "	7.000 "	9.620 "
Sulphate of lime.....	0.290 "	0.443 "	5.509 "
Phosphate of lime.....	0.196 "	0.253 "	0.253 "
Carbonate of lime.....	1.429 "	1.250 "	10.180 "
Magnesia, carbonate.....	0.915 "	0.907 "	1.096 "
Potash.....	0.085 "	0.078 "	0.108 "
Moisture.....	4.237 "	5.308 "	6.485 "
Organic matter and water of combination.....	3.898 "	4.951 "	6.614 "
Ammonia.....	Traces	None	None
	100.000	100.000	100.000

Analysis of the Water from Artesian Well at Kissimmee.

In 100,000 parts of water.

Total solids.....	12.50 parts
Mineral solids.....	6.42 parts
Volatile solids (carbonic acid and water of combination).....	6.08 parts
Chlorine.....	0.70 parts
Sulphates.....	None
Nitrites.....	None
Free ammonia.....	0.0032 parts
Albuminoid ammonia.....	0.0040 parts
Hardness total.....	9.5 degrees
Hardness permanent.....	7.0 degrees
Hardness temporary.....	2.5 degrees

The mineral solids are as follows:

Alumina, probably from suspended clay.....	0.45 parts
Sodium chloride (common salt).....	1.15 parts
Calcium oxide (equivalent to 7.01 pts. carb. lime).	4.00 parts
Magnesia oxide (equivalent to 1.72 pts. carb. mag.).	0.82 parts
	6.42 parts

These results show this to be a most excellent water, the small amount of ammonia, both free and albuminoid, shows

that it is not in any way polluted with organic matter, which the absence of nitrites also confirms.

We use in this laboratory the method known as Wanklyn's process, and he interprets his results as follows:

1. More than 7.1 parts per hundred thousand of chlorine, accompanied by more than .005 parts per hundred thousand of free ammonia, and more than .010 per hundred thousand of albuminoid ammonia indicate that the water is polluted with sewage, decaying animal matter, urine, etc.

2. Total solids should not exceed 57.1 parts per hundred thousand.

3. Water showing less than 5 degrees is termed soft; between 5 and 10 degrees medium, and above 10 degrees hard.

Analysis of water for Mr. F. G. Baldwin, Lake Maitland, Fla.

In 100,000 parts of water.

Free Ammonia	0.002 parts
Albuminoid ammonia	0.002 parts
Nitrites	None.
Chlorine	2.00 parts
Corresponding to sodium chloride	3.30 parts
Total solids	6.70 parts
Mineral solids	3.25 parts
Hardness	5.00 degs.

This is also an excellent water, the small amounts of ammonia show that it is not in any way polluted with organic matter, which the absence of nitrites also confirms.

We cannot tell from whence comes the sodium chloride (common salt); it might come from the glazing of the jug, or it may really exist in the water; the amount is not excessive, and is certainly harmless. The hardness is caused by this salt, and not by carbonate of lime or magnesia; there is no magnesia, and practically no lime, and the absence of the latter is certainly remarkable in a water obtained in Florida.

Respectfully submitted,

W. A. RAWLS,
State Chemist.

TABLE A.

BUREAU OF FERTILIZERS.

W. A. RAWLS, State Chemist. C. G. HELLMAN, Assistant Chemist.

ANALYSES OF FERTILIZERS.

Name of Fertilizer.	Moisture.	Phos. Acid. Available.	Phos. Acid. Insoluble.	Ammonia.	Potash (K_2O).	Guaranteed Analysis. Moisture.	Available Phos. Acid.	Insoluble Phos. Acid.	Ammonia.	Potash (K_2O).	By Whom and Where Manufactured.
Ammonia Sulphate	3.81	.....	.....	21.76	.....	.....	.....	.....	25	.....	Standard Guano and Chem. Co., New Orleans, La.
Acid Phosphate High Grade	12.48	13.91	2.46	.....	.....	.....	14 to 15	.....	.....	.....	Wilson & Toomer, Jacksonville, Fla.
Acme Fertilizer No. 1	16.54	7.41	1.28	4.18	7.68	13 to 16	8 to 9	1½ to 2	4½ to 5	9 to 10	John N. Meyer, Maspeth, N. Y.
Acme Fertilizer No. 2	11.08	6.28	2.68	5.44	5.00	13 to 16	8 to 9	1½ to 2	6 to 6½	5 to 6	John N. Meyer, Maspeth, N. Y.
Animal Bone and Potash	3.75	4.93	9.14	3.57	5.79	6 to 8	.....	13 to 18	1 to 2	8 to 10	Union Stock Yards, Chicago, Ill.
Acid Phosphate Georgia State Standard	14.21	15.99	1.15	.....	.....	14		12	2	.....	Southern Fertilizer Co., Savannah, Ga.
Animal Guano	6.23	5.76	8.63	6.65	0.96	5 to7½	12 to 14	.....	6½to7½	.....	Thompson & Edwards Fert. Co., Chicago, Ill.
Acme Potato	13.64	5.00	3.50	3.74	7.96	13 to 16	4 to 5	3 to 4	3½ to 4	9 to 10	John N. Meyer, Maspeth, N. Y.
Acme Orange Tree, Special	12.00	7.42	2.68	4.76	5.02	13 to 16	5 to 6	1½ to 2	4½	5 to 6	John N. Meyer, Maspeth, N. Y.
Acid Phosphate	12.06	15.04	1.08	.....	.....	12	14	2	.....	.....	Standard Fertilizer Co., Charleston, S. C.
Acid Phosphate	4.14	16.05	6.97	.....	.....	10 to 12	14 to 15	1 to 2	.....	.....	Little Bros. Fert. & Phos. Co., Jacksonville, Fla.
Acid Phosphate Second Sample	5.00	16.71	6.39	.....	.....	10 to 12	14 to 15	1 to 2	.....	.....	Little Bros. Fert. & Phos. Co., Jacksonville, Fla.
Acid Phosphate, Bradley's Palmetto	4.82	15.03	1.79	.....	.....	10 to 20	12 to 15	1 to 2	.....	.....	Bradley Fertilizer Co., Boston, Mass.
Acid Phosphate, High Grade	12.48	13.91	2.46	.....	.....	12	14	2	.....	.....	Wilson & Toomer, Jacksonville, Fla.
Acme Orange Tree Special	6.37	7.55	1.28	6.97	8.33	13 to 16	5 to 6	1½ to 2	4½	5 to 6	John N. Meyer, Maspeth, N. Y.
Bone Meal	10.12	4.48	19.82	5.27	0.47	.....	5 to 8	15 to 17	2½to4½	.....	A. C. Berry, Brent, Fla.
B. D. Sea Fowl Guano	14.94	8.70	2.04	2.51	1.81	10 to 20	8 to 12	1 to 2	2 to 3	1 to 2	Bradley Fertilizer Co., Boston, Mass.
Berkshire Orange Tree, Formula B	11.46	8.32	2.24	6.05	6.76	.....	6 to 8	1 to 2	6 to 7	5 to 6	Berkshire Mills Co., Bridgeport, Conn.

Blood Bone and Potash	8.28	9.79	1.85	6.46	7.53	.....	.....	10 to 12	5 to 6	7 to 9		Armour & Co., Chicago, Ill.
Blood and Bone	6.03	6.96	10.24	6.97	0.39	.....	.....	13 to 16	6½to8½	.....		Preston Fertilizer Co., Brooklyn, N. Y.
Blood and Bone	7.43	10.05	1.91	7.99	0.44	4 to 5	.....	14 to 17	6½ to 8	.....		Armour & Co., Chicago, Ill.
Bone Meal and Potash	6.92	8.13	9.27	5.44	6.55	5 to 10	.....	13 to 16	4 to 6	6½to7½		M. L. Shoemaker & Co., Philadelphia, Pa.
Bone Meal	7.03	8.32	14.26	5.10	.....	10 to 20	.....	20 to 28	3 to 5	.....		Bradley Fertilizer Co., Boston, Mass.
Bone Meal	5.73	9.53	13.75	6.29	.....	5 to 10	.....	20 to 23	5 to 6	.....		M. L. Shoemaker & Co., Philadelphia.
Blood, Bone and Potash, No. 3	6.66	7.30	2.81	4.76	5.96	10 to 12	4 to 5	5 to 6	4 to 5	4 to 5		Florida Fertilizer and Mf'g Co., Gainesville, Fla.
Bone and Potash Circle Brand	12.90	5.83	8.13	3.57	2.90	10 to 20	4 to 6	5 to 6	2¼to3¼	2½to3½		Bradley Fertilizer Company, Boston, Mass.
Bone Meal, Pure	6.07	11.65	12.79	3.74	.....	(8 to 15	.....	18 to 25	3 to 5	.....		Williams & Clark, New York.
Bone, Pure Ground	4.18	7.39	8.60	2.90	.....	8 to 10	8 to 10	14 to 16	3 to 4	.....		Union Stock Yards, Chicago, Ill.
Bone Dust, Pure	3.07	13.82	18.35	1.19	.....	.....	.....	26.67	0.87	.....		Peter Cooper Glue Factory, New York.
Blood, Bone and Potash	4.04	7.94	5.75	5.27	12.13	.....	.....	15 to 18	5 to 6	6 to 8		Wilson & Toomer, Jacksonville, Fla.
Bone and Tankage	5.70	11.53	4.47	7.48	.....	7 to 9	2 to 5	13 to 15	6 to 8	.....		L. B. Darling Fertilizer Co., Pawtucket, R. I.
Bone and Potash	7.06	7.05	5.10	1.70	9.31	12	4 to 6	5 to 7	1½ to 2	8 to 10		Williams & Clark, New York.
Bone, Pure Raw Ground	6.86	10.30	14.13	4.08	.....	6 to 9	.....	20 to 23	4 to 5	.....		Standard Guano Chem. Co., New Orleans, La.
Bone, Steamed	3.96	10.97	17.19	3.16	.....	6 to 7	.....	25 to 27	4 to 5	.....		Little Bros., Fert. and Phos., Jacksonville, Fla.
Bone Pulverized	5.01	.....	27.63	4.08	.....	.....	.....	20	3	.....		Wilson & Toomer, Jacksonville, Fla.
Bone, Pure Pulverized	6.21	7.13	21.61	3.63	0.39	5	6	22	3	1		Cudahy Packing Co., South Omaha, Neb.
Bone, Baltimore Soluble	13.83	10.47	1.75	1.87	1.70	10 to 15	10 to 12	1 to 3	1 to 2	1 to 2		Patapsco Guano Co., Baltimore, Md.
Blood and Bone	6.76	11.77	5.43	6.29	0.43	6.5	.....	15.3	7.31	0.25		Cudahy Packing Co., South Omaha, Neb.
Bradley's Bone and Potash	5.24	6.01	5.50	1.87	10.01	10 to 20	4 to 6	6 to 7	8 to 10	8 to 10		Bradley Fertilizer Co., Boston, Mass.
Bowker's Bone and Potash	9.56	8.00	9.91	2.72	1.99	12 to 16	4 to 5	5 to 6	2 to 3	2 to 3		Bowker Fertilizer Co., Elizabethport, N. J.
B. D. Seafoul Guano	6.41	10.37	1.91	3.06	1.67	16 to 20	8 to 12	1 to 2	2 to 3	1 to 2		Bradley Fertilizer Co., Boston, Mass.
Blood and Bone, Pigs Foot Brand	8.48	2.81	3.07	6.19	.....	.....	.....	7	5	.....		Wilson & Toomer, Jacksonville, Fla.
Baldwin's Dissolved Bone	8.63	9.79	3.00	3.23	2.87	12 to 15	8	2	2	2		Baldwin Fertilizer Co., Savannah, Ga.
Blood and Bone	6.23	5.76	8.63	6.65	0.96	5 to7½	12 to 14	.....	6½to7½	.....		Thomson & Edwards Fertilizer Co., Chicago, Ill.
Bowker's Cotton Fertilizer	9.46	7.94	2.30	2.38	1.82	12 to 16	7 to 9	1 to 2	2 to 3	1 to 2		Bowker Fertilizer Co., Elizabethport, N. J.
Carey's Extra for Tomatoes	10.30	6.08	1.60	4.76	10.21	8 to 15	6 to 8	2 to 3	4 to 5	10 to 12		Southern Fertilizer Co., Orlando, Fla.
Cabbage and Cauliflower	6.69	6.00	8.58	4.25	7.10	6.42	5 to 7	.....	4 to 5	7 to 9		Preston Fertilizer Co., New York.
Cabbage and Cauliflower, 2d Sample	11.44	6.65	5.82	3.74	8.69	6.42	5 to 7	.....	4 to 5	7 to 9		Preston Fertilizer Co., New York.
Cudahy's Blood and Bone	5.87	8.58	8.18	6.46	0.29	6.5	.....	15.3	7.31	0.25		Cudahy Packing Company, South Omaha, Neb.
Cudahy's Pulverized Bone	5.59	13.05	15.35	3.40	0.19	5	6	22	3	1		Cudahy Packing Co., South Omaha, Neb.
Cotton Seed Meal, Bright	.....	.....	.....	9.18	.....	.....	.....	.....	8.60	.....		Cotton Seed Oil Co., Union Springs, Ala.
Cotton Seed Meal, Bright	8.12	.....	.....	8.84	.....	.....	.....	.....	7½ to 8	.....		Hugh Pettit & Co., Memphis, Tenn.
Cotton Seed Meal, Bright	7.14	.....	2.62	8.67	1	7.77	.....	2.70	8.50	.....		Southern Cotton Oil Co., Montgomery, Ala.
Cotton Boll Guano	12.40	8.64	4.15	3.03	2.64	12 to 15	8 to 10	1 to 2	2 to 2½	2 to 3		Southern Fertilizer Co., Savannah, Ga.

Com. Fert. for Truck Growing Form D..	8.92	7.74	4.15	5.44	7.57	10 to 12	7 to 9	3 to 5	4½to5½	6 to 8	L. B. Darling Fertilizer Co., Pawtucket, R. I.
Corn and Cotton Compound.....	15.62	9.18	0.41	2.38	2.53	10 to 15	8 to 12	1 to 3	2 to 3	1¾ to 3	Standard Guano Chem. Co., New Orleans, La.
Cumberland Bone Superphosphate.....	13.76	8.07	1.58	2.17	1.64	12 to 16	8 to 11	2 to 3	2 to 3	1 to 2½	Chas. Ellis, New York.
Cotton No. 1.....	11.90	7.74	4.02	2.89	3.65	8 to 10	8 to 10	1 to 2	2 to 3	2 to 3	Little Bros.' Fert. and Phos. Co., Jacksonville, Fla.
Complete Orange Tree Manure.....	13.60	4.87	2.27	3.74	11.87	0 to 12	4 to 5	1 to 3	3.40 to 4	10 to 12	H. J. Baker & Bro., New York.
Cotton Seed Meal, Bright.....	6.20	.....	3.52	9.18	1.12	7.65	.....	3.22	6.79	1.96	Selma Mills, Selma, Ala.
Cotton Seed Meal, Bright.....	8.89	.....	2.55	9.35	1.72	7 to 8	.....	2 to 3	8 to 9	1 to 2	Georgia Cotton Oil Co., Macon, Ga.
Cotton Seed Meal, Dark.....	10.96	.....	2.46	5.27	1.28	8 to 12	.....	2 to 3	5 to 7	¾to 1½	Florida Manufacturing Co., Madison, Fla.
Cotton Seed Meal, Dark, 2d Sample.....	9.89	.....	2.30	5.44	1.77	8 to 12	.....	2 to 3	5 to 7	¾to 1½	Florida Manufacturing Co., Madison, Fla.
Cabbage Fertilizer	12.25	8.00	1.15	4.76	4.64	10 to 15	6 to 9	2 to 3	4 to 6	6 to 8	Standard Guano Chem. Co., New Orleans, La.
Cotton Seed Meal, Bright.....	6.49	.....	2.82	9.11	1.72	5½to6½	.....	2½ to 3	8¼ to 9	1½ to 2	Alabama Cotton Oil Co., Mobile, Ala.
Chatham Guano	11.19	9.09	2.68	2.14	2.13	12 to 16	8 to 11	2 to 4	2 to 3	1½ to 3	Commercial Guano Co.. Savannah, Ga.
Cumberland Bone Superphosphate.....	8.62	8.45	3.83	2.89	1.86	12 to 16	8 to 11	2 to 3	2 to 3	1 to 2½	Chas. Ellis, Savanrah, Ga.
Cumberland Fertilizer	9.36	10.04	1.66	3.06	1.90	12 to 16	8 to 11	2 to 3	2 to 3	1 to 2½	Chas. Ellis, Savanrah, Ga.
Cotton Fertilizer	11.63	12.35	3.58	3.23	1.80	8 to 10	8 to 10	2 to 4	2 to 3	2 to 3	Little Bros.' Fert. and Phos. Co., Jacksonville, Fla.
Cotton Fertilizer No. 1.....	10.92	11.39	7.80	2.04	2.64	8 to 10	8 to 10	2 to 4	2 to 3	2 to 3	Little Bros.' Fert. and Phos. Co., Jacksonville, Fla.
Damaraland Guano	18.91	13.06	2.94	6.90	3.23	16 to 20	12 to 15	4 to 6	7 to 10	3½to4½	Wilson & Toomer, Jacksonville, Fla.
Durham Blood and Bone.....	6.23	5.76	8.63	6.65	0.96	5 to7½	12 to 14	.....	6½to7½	.....	Thompson & Edwards Fert. Co., Chicago, Ill.
Dissolved Bone Phosphate.....	6.11	16.25	1.02	.....	.....	12 to 15	13 to 15	1½to2½	.....	.....	G. Ober & Sons Co.,Baltimore.
Ellis Productive Bone Superphosphate...	13.47	9.72	1.98	2.72	2.00	12 to 16	8 to 10	1 to 2	2 to 3	1¼ to 2	Chas. Ellis Savanrah, Ga.
Florida Cuban Tobacco.....	7.84	8.39	1.85	5.27	5.30	10 to 20	6 to 8	2 to 3	5 to 7	5 to 7	Williams & Clark, New York.
Fruit and Vine.....	12.60	7.23	0.45	2.89	10.25	10 to 20	5½to7½	3 to 4	2¼to3¼	10 to 12	Bradley & Co., Boston, Mass.
Fruit and Vine Fertilizer.....	11.65	9.21	2.32	3.46	10.96	10 to 12	8 to 10	2 to 4	2 to 4	10 to 12	I. P. Thomas & Son Co., Philadelphia, Pa.
Fruit and Vine Grower.....	7.55	9.54	1.19	3.40	8.79	12 to 16	7 to 9	2 to 3	2½to3½	9 to 10	Bowker Fertilizer Co., Elizabethport, N. J.
Fruit and Vine.....	8.40	8.03	5.16	3.48	11.60	8 to 10	5½to7½	1½ to 2	2 to 3	12 to 14	Little Bros.' Fert. and Phos. Co., Jacksonville, Fla.
Fruit and Vine Grower.....	11.26	6.85	0.25	2.25	10.32	10 to 18	5½to7½	3 to 4	2¼to3¼	10 to 12	Williams & Clark, New York.
Farmers Ammoniated Dissolved Bone...	12.74	10.42	2.75	2.47	1.42	12 to 15	8 to 10	1 to 2	2 to 2½	1 to 1½	Southern Fertilizer Co., Savannah, Ga.
Fruit and Vine Fertilizer.....	11.96	7.64	0.89	3.40	12.30	12 to 15	6 to 8	1 to 2	2½to3½	10 to 12	G. Ober & Sons, Baltimore, Md.
Fruit and Vine Manure.....	9.65	6.20	1.28	3.06	10.45	9 to 13	6 to 7	1 to 2	2 to 3	10 to 12	H. J. Baker & Bro., New York.
Fruit and Vine Manure.....	8.92	7.43	0.89	4.00	12.09	8 to 10	5 to 7	2 to 4	2 to 3	10 to 12	Mapes Form and Fe. Gu. Co., Newark, N. J.
Fish and Potash.....	7.16	3.78	1.72	8.00	5.91	10 to 12	3 to 4	3 to 4	8 to 9	3 to 5	Florida Fert. Manufacturing Co., Gainesville, Fla.
Fish and Potash.....	13.04	5.44	2.11	4.25	3.07	10 to 20	.....	5 to 7	3½to4½	2½to2½	Bradley Fertilizer Co., Boston, Mass.
Fish, Dried	9.15	4.10	3.58	9.86	.....	10 to 15	.....	6 to 7	10 to 12	.....	Bradley Fertilizer Co., Boston, Mass.
Fish, Ground	8.45	.....	9.08	11.05	.....	.....	.....	.....	8 to 12	.....	Wilson & Toomer, Jacksonville, Fla.

Fruit and Vine Fertilizer	7.24	11.65	1.79	3.57	13.59	5 to 8	8 to 9	2 to 4	2½to2½	11 to 13	Armour & Co., Chicago, Ill.
Fish Scrap	8.28	6.02	2.75	11.05	0.75	.....	.....	.....	.....	.....	Florida Fertilizer Mfg. Co., Gainesville, Fla.
Ga. State St'd. Am. Superphosphate	11.87	8.45	3.07	2.55	3.12	12 to 15	8 to 10	1 to 2	2 to 2½	2 to 3	Southern Fertilizer Co., Savannah, Ga.
Goulding's High Grade Acid Phosphate	13.51	15.60	4.35	.....	.....	10 to 15	15 to 17	1 to 3	.....	.....	Goulding Fertilizer Co., Pensacola, Fla.
Goulding's Bone Compound	15.34	8.70	4.22	3.23	2.09	10 to 15	10 to 12	1 to 3	1.65 to 2	1½ to 2	Gould'ng Fertilizer Co., Pensacola, Fla.
Grass Manure	10.54	7.20	0.22	6.97	5.13	5 to 6	5 to 6	.....	7 to 8	4½ to 5	Southern Fertilizer Co., Orlando, Fla.
High Grade Acid Phosphate and Potash	13.65	13.31	6.65	.....	2.13	10 to 15	14 to 16	1 to 3	.....	1 to 3	Goulding Fertilizer Co., Pensacola, Fla.
Home Compound	15.15	7.94	0.76	2.38	1.74	7 to 15	6½to 10	1 to 3	1½ to 3	1 to 2	A. P. Brantley Co., Blackshear, Ga.
High Grade Vegetable	12.06	10.17	0.51	5.20	6.91	8 to 15	9½to 12	1 to 2	5 to 6	6 to 7	Southern Fertilizer Co., Orlando, Fla.
High Grade Fruit and Vine Fertilizer	5.48	7.55	2.50	3.74	10.04	8	6	2	4	10	Cincinnati Dessicating Co., Cincinnati, O.
Ideal Fruit and Vine Manure	8.03	6.47	1.53	3.74	11.30	8 to 10	6 to 8	1 to 3	2½ to 4	10 to 12	Wilson & Toomer, Jacksonville, Fla.
Ideal Fertilizer	6.25	6.39	1.15	4.93	7.11	10 to 12	4½to5½	1 to 3	4½ to 5	6 to 8	Wilson & Toomer, Jacksonville, Fla.
Ideal Vegetable Manure	8.39	7.68	1.28	5.10	10.00	8 to 10	6 to 8	1 to 2	4 to 5	8 to 10	Wilson & Toomer, Jacksonville, Fla.
I. X. L. Acid Phosphate	11.93	14.33	2.55	.....	.....	12½	13½	2	.....	.....	Mobile Phosphate and Chemical Co., Mobile, Ala.
Ideal Blood and Bone	4.82	8.32	10.87	7.06	0.48	.....	.....	5 to 20	7 to 9	.....	Wilson & Toomer, Jacksonville, Fla.
Ideal Potato Manure	8.39	7.68	1.28	5.10	10.00	8 to 10	6 to 8	1 to 2	4 to 5	8 to 10	Wilson & Toomer, Jacksonville, Fla.
Kainit	2.30	.....	.....	.....	12.20	.....	.....	.....	.....	12 to 13	Little Bros. Fert. and Phos. Co., Jacksonville, Fla.
Kainit	2.76	.....	.....	.....	12.36	.....	.....	.....	.....	12 to 13	Little Bros. Fert. and Phos. Co., Jacksonville, Fla.
Kainit	2.00	.....	.....	.....	12.24	.....	.....	.....	.....	10.50	Bradley Fertilizer Co., Boston, Mass.
Kainit	1.32	.....	.....	.....	12.70	.....	.....	.....	.....	12 to 13	Frank Adams, Jasper, Fla.
Lettuce Fertilizer	9.27	9.11	0.35	6.29	9.07	10 to 12	8 to 10	1 to 2	5 to 6	10 to 12	Southern Fertilizer Co., Orlando, Fla.
Mobile Standard Guano	10.21	8.25	3.90	3.57	3.31	12½	9¼	1¼	1.65	2	Mobile Phos. and Chemical Co., Mobile, Ala.
Mapes Orange Tree Manure	8.62	8.07	1.91	5.44	3.90	10 to 12	6 to 8	2 to 4	4 to 5	3 to 4	Mapes Form. and Feru. Guano Co., Newark, N. J.
Mapes Pineapple Manure	18.68	4.74	2.17	5.27	5.33	10	4 to 6	2 to 4	5 to 6	5 to 6	Mapes Form. and Peru. Guano Co., Newark, N. J.
Marriman's Cotton Boll	11.40	9.34	3.96	2 21	2.27	12 to 16	9 to 11	2 to 4	2 to 4	2 to 4	Commercial Guano Co., Savannah, Ga.
Nursery Stock	14.64	9.69	1.44	4.35	2.17	10 to 20	8½-10¼	1 to 2	4½to5½	1½to2¼	Williams & Clark, New York.
Nursery Stock	12.70	9.86	1.53	5.27	1.70	10 to 20	9 to 11	1 to 2	4½to5½	1¼to2¼	Bradley Fertilizer Co., Boston, Mass.
No. 1 Peruvian Guano	17.65	10.08	2.26	6.97	1.70	8 to 10	8 to 10	4	10	1½	Mapes Fertilizer Peru. Guano Co., Newark, N. J.
Ober's Florida Vegetable Fertilizer	0.45	6.98	1.66	4.59	8.88	12 to 15	6 to 8	1 to 2	5 to 6	6 to 8	G. Ober & Sons Co., Baltimore, Md.

Orange Tree Fertilizer	7.39	7.55	4.44	3.40	5.19	10 to 15	7 to 9	1 to 3	2½to3½	5 to 6½	**Standard Guano & Chem. Co., New Orleans, La.**
Orange Compound	6.10	7.68	1.15	5.27	6.20	10 to 15	6 to 9	2 to 3	4 to 6	6 to 8	Standard Guano & Chem. Co., New Orleans, La.
Orange Tree Fertilizer	11.57	7.45	1.00	4.66	5.97	6 to 8	6 to 8	1 to 2	3½to4½	5 to 7	Williams & Clark, New York.
Orange Tree Fertilizer	8.82	9.15	3.20	3.91	5.31	10 to 15	8 to 10	3 to 4	3 to 5	6½to7½	M. L. Shoemaker & Co., Philadelphia, Pa.
Orange Tree Fertilizer "A"	7.92	4.74	1.72	5.10	11.78	8 to 10	8 to 10	3 to 4	4 to 5	10 to 12	Jacksonville Fertilizer Co., Jacksonville, Fla.
Orange Tree Mixture No. 2	10.92	9.09	3.51	2.55	5.02	10 to 12	8 to 9	3 to 4	2 to 3	4 to 5	Florida Fert. and Mf'g Co., Gainesville, Fla.
Orange Tree Fertilizer	19.80	5.38	2.30	4.08	5.99	10 to 20	6 to 8	2 to 3	3½to4½	5 to 6	Bradley Fertilizer Co., Boston, Mass.
Orange Planter's True Value No. 1	10.88	8.41	0.67	4.25	12.13	8 to 10	8 to 10	2 to 3	3½to4½	10 to 12	Little Bros. Fert. and Phos. Co., Jacksonville, Fla.
Orange Planter's True Value No. 3	4.77	8.23	0.54	5.61	5.60	8 to 10	6 to 8	2 to 4	4 to 5	3½to4½	Little Bros. Fert. and Phos. Co., Jacksonville, Fla.
Orange Tree Manure	5.05	9.34	1.91	5.10	3.67	8	7	3	5	3½	Cincinnati Dessicating Co., Cincinnati, O.
Orange Tree Fla. Phosphate Manure	15.09	7.94	0.38	4.08	7.30	8 to 10	8 to 10	1 to 2	3 to 4	7 to 9	Little Bros. Fert. and Phos. Co., Jacksonville, Fla.
Orange Tree and Vine Formula "A"	6.90	9.92	9.78	9.45	3.18	10 to 13	2 to 4	8 to 10	5 to 6	3½to4½	L. B. Darling Fertilizer Co., Pawtucket, R. I.
Orange Tree and Vine Formula "B"	8.14	7.74	3.33	2.89	9.12	.....	2½to3½	1½to8½	2½to3½	11 to 13	L. B. Darling Fertilizer Co., Pawtucket, R. I.
No. 1 Peruvian Fish and Guano Mixture	10.28	6.40	2.81	4.59	6.33	10 to 12	5 to 6	4 to 5	4 to 5	4 to 5	Florida Fert. and Mf'g Co., Gainesville, Fla.
Potato Fertilizer	9.90	6.53	6.26	4.08	8.42	6.42	8 to 9	.....	4 to 5	7 to 9	Preston Fertilizer Co., New York.
Patapsco Guano	12.00	8.83	2.49	3.06	2.64	12 to 15	9 to 11	1 to 3	2½ to 3	2 to 2½	Patapsco Guano Co., Baltimore, Md.
Potash, High Grade, Sulphate	0.38	.....	.....	.....	47.12	.....	.....	.....	.....	49.7	Wilson & Toomer, Jacksonville, Fla.
Potash, Sulphate	2.93	.....	.....	.....	26.09	.....	.....	.....	.....	26.7	Wilson & Toomer, Jacksonville, Fla.
Pineapple Fertilizer	8.10	7.55	0.90	5.71	5.41	10 to 20	6 to 8	2 to 3	5 to 6	5 to 6	Bradley Fertilizer Co., Boston, Mass.
Potato	12.39	7.30	0.70	4.93	7.60	8 to 10	7 to 9	1 to 2	3 to 4	9 to 10	Little Bros. Fert and Phos. Co., Jacksonville, Fla.
Potato Fertilizer	13.21	6.59	0.19	4.42	10.56	.....	6 to 8	.....	4 to 5	10 to 12	Southern Fertilizer Co., Orlando, Fla.
Potato Mixture	7.00	4.83	1.18	4.08	10.28	10 to 12	3 to 4	4 to 5	3½to4½	9 to 11	Florida Fert. and Mf'g Co., Gainesville, Fla.
Pineapple Fertilizer	7.00	5.19	1.59	5.78	8.88	8 to 10	7 to 8	2 to 3	7 to 8	7 to 8	Jacksonville Fertilizer Co., Jacksonville, Fla.
Pineapple Fertilizer	7.50	7.00	1.70	5.78	6.05	10 to 18	6 to 8	1 to 2	5 to 6	5 to 6	Williams & Clark, New York.
Pope's Special Sea Island	12.46	10.88	4.09	2.55	3.96	10 to 12	10 to 12	2 to 4	2 to 4	4 to 6	Little Bros. Fert. and Phos. Co., Jacksonville, Fla.
Southern Fertilizer Co.'s No. 1	9.51	5.77	3.96	5.44	4.25	10 to 12	5 to 6	1 to 2	5 to 6	4 to 5	Southern Fertilizer Co., Orlando, Fla.
Southern Fertilizer Co.'s No. 2	6.82	4.23	3.13	5.78	10.62	10 to 12	4 to 5	1 to 2	5 to 6	10 to12	Southern Fertilizer Co., Orlando, Fla.
Southern Fertilizer Co.'s No. 4	6.68	5.95	3.58	3.27	10.36	10 to 12	5 to 6	1 to 2	3 to 4	10 to 12	Southern Fertilizer Co., Orlando, Fla.
Southern Fertilizer Co.'s Vegetable	8.12	6.41	2.55	4.82	6.13	10 to 12	6 to 7	1 to 2	5 to 6	6 to 7	Southern Fertilizer Co., Orlando, Fla.
Sea Gull Compound	13.00	11.40	2.55	1.83	2.43	10 to 15	10 to 11	1 to 2	1¼to2¼	2 to 3	Patapsco Guano Co., Baltimore, Md.
Swift's Sure Superphos. for Orange Tree	9.07	8.96	3.83	3.74	6.37	10 to 15	8 to 10	3 to 4	3 to 5	6½to7½	M. L. Shoemaker & Co., Philadelphia, Pa.
Soda, Nitrate	1.55	.....	.....	18.62	.....	.....	.....	.....	18.50	.....	Wilson & Toomer, Jacksonville, Fla.
Seminole Pineapple Mixture	7.30	1.55	0.12	6.12	4.75	.....	1 to 2	.....	4 to 5	3 to 5	Wilson & Toomer, Jacksonville, Fla.
Southern Fertilizer Co.'s No. 1	13.08	6.46	2.04	5.44	5.27	10 to 12	5 to 6	1 to 2	5 to 6	4 to 5	Southern Fertilizer Co., Orlando, Fla.
Strawberry Fertilizer	9.35	8.09	2.65	4.25	9.06	10 to 12	6 to 7	4 to 5	2 to 3	10 to 12	Florida Fert. and Mf'g Co., Gainesville, Fla.

Scott's Animal Ammoniated Guano	13.02	10.20	2.34	2.89	1.91	10 to 15	9 to 11	1 to 2	2 to 3	1 to 2	Southern Fertilizer Co., Savannah, Ga.
Simon Pure No. 1	10.86	7.84	0.48	4.59	10.13	5 to 8	6 to 7	2 to 3	4 to 4½	12 to 13	Edward O. Painter & Co., DeLand, Fla.
Simon Pure No. 2	8.31	10.56	2.62	5.44	5.99	5 to 8	6 to 7	.....	4 to 5	7 to 9	Edward O. Painter & Co., DeLand, Fla.
Simon Pure Garden	7.79	9.30	1.64	6.36	6.20	8 to 12	5 to 6	5 to 6	5 to 6	7 to 9	Edward O. Painter & Co., DeLand, Fla.
Strawberry Fertilizer	10.40	6.85	2.36	3.40	5.93	10 to 18	6 to 9	1 to 2	3 to 4	6 to 8	Williams & Clark, New York.
Special	9.70	5.13	1.53	5.10	5.95	10 to 12	4 to 5	.....	4 to 6	6 to 7	E. O. Painter & Co., DeLand, Fla.
Special Mixture No. 1	7.38	6.97	2.43	5.44	5.18	8 to 10	6 to 7	1 to 2	5 to 6	5 to 6	Wilson & Toomer, Jacksonville, Fla.
Simon Pure Tomato	11.11	8.95	1.28	6.46	7.51	8 to 12	4 to 5	1 to 2	5 to 6	9 to 11	E. O. Painter & Co., DeLand, Fla.
Star Orange Tree Fertilizer	20.21	8.13	1.53	4.08	3.57	12 to 14	7½ to 9	1 to 2	4 to 5	4 to 5	Tygert Allen Fert. Co., Philadelphia, Pa.
Special Strawberry Fertilizer	12.75	8.96	0.89	2.38	5.57	8 to 10	5 to 8	2 to 3	2 to 4	3 to 5	Wilson & Toomer, Jacksonville, Fla.
Tomato Fertilizer	8.82	6.00	7.43	4.59	6.94	6 to 8	5 to 7	.....	4 to 5	7 to 9	Preston Fertilizer Co., New York.
Tobacco Fertilizer	6.70	7.16	0.32	5.78	6.64	8 to 10	5½ to 6	.....	5 to 6	6 to 7	Southern Fertilizer Co., Orlando, Fla.
Tobacco Manure	11.51	4.54	1.08	5.44	6.82	10 to 12	4 to 6	.....	5 to 6	6 to 7	Mapes Form. and Peru. Guano Co., Newark, N. J.
Tomato Special	14.15	11.25	0.27	3.91	2.53	12 to 15	10 to 12	1 to 2	3 to 4	2 to 3	Wilson & Toomer, Jacksonville, Fla.
Tobacco Fertilizer	7.22	7.55	3.20	3.40	12.31	8 to 10	7 to 8	1 to 2	3 to 4	13 to 14	Little Bros. Fert. and Phos. Co., Jacksonville, Fla.
Truck Fertilizer	13.48	7.81	6.77	2.89	3.22	8 to 10	8 to 10	1 to 2	2 to 3	4 to 5	Little Bros. Fert. and Phos. Co., Jacksonville, Fla.
Vegetable Fertilizer	10.49	6.72	6.71	3.91	6.40	6 to 8	8 to 9	.....	4 to 5	7 to 8	Preston Fertilizer Co., New York.
Vuelta Abago Tobacco Fertilizer	8.09	8.13	2.11	5.27	5.26	10 to 20	6 to 8	2 to 3	5 to 6	5 to 6	Bradley Fertilizer Co., Weymouth, Mass.
Vegetable No. 1	14.40	9.15	0.70	5.61	7.25	8 to 1	9 to 10	1 to 2	5 to 6	6 to 7	Little Bros. Fert. and Phos. Co., Jacksonville, Fla.
Vegetable Grower	20.23	8.13	0.12	4.32	3.67	12 to 16	7 to 8	1 to 2	4 to 5	4 to 5	Bowker Fertilizer Co., Elizabethport, N. J.
Vegetable Fertilizer	9.75	6.02	2.81	4.42	5.37	10 to 20	6 to 8	1 to 2	4 to 5	5 to 7	Bradley Fertilizer Co., Boston, Mass.
Vegetable Swift Sure	11.62	11.55	2.84	4.08	4.56	10 to 15	9 to 11	5 to 6	3 to 5	4 to 6	M. L. Shoemaker & Co., Philadelphia, Pa.
Vegetable Fertilizer	9.87	7.45	1.50	3.91	7.53	10 to 15	6 to 9	1 to 3	4 to 5½	4 to 6	Standard Guano & Chem. Co., New Orleans, La.
Vegetable Manure	6.11	7.87	1.47	6.38	5.25	10 to 12	6 to 8	2 to 4	5 to 8	4 to 6	Mapes Form. and Peru. Guano Co., Newark, N. J.
Vegetable	8.28	7.90	2.20	5.44	6.76	8 to 10	7 to 8	2 to 3	4½ to 5	6 to 7	Jacksonville Fertilizer Co., Jacksonville, Fla.
Vegetable Fertilizer	9.40	10.88	2.68	5.78	6.68	5 to 8	7 to 9	2 to 3	5 to 5	5 to 7	Armour & Co., Chicago, Ill.
Wilson's Cotton Fertilizer	12.30	7.55	9.08	2.04	3.49	8 to 10	8 to 10	.....	2 to 3	2 to 3	Little Bros. Fert. and Phos. Co., Jacksonville, Fla.

TABLE B.

FERTILIZER ANALYSES MADE SINCE LAST ISSUE OF MONTHLY BULLETIN.

Source of Sample.	Name of Fertilizer.	Moisture.	Phos. Acid		Ammonia.	Potash (K_2O).	Name of Manufacturer.	Name of Sender.
			Available.	Insoluble.				
Special sample..	High Grade Tankage	6.54	4.04	3.64	10 37	0.43	Fairbank Canning Co., Chicago	Wilson & Toomer, Jacksonville, Fla
Special sample..	Blood and Bone No 1	9.83	4.87	6.65	8.84	0.23	Cudahy Packing Co., South Omaha, Neb	C W Zaring, Jacksonville, Fla.
Special sample..	Blood and Bone No 2	7.78	7.17	5.11	7.82	0.19	Cudahy Packing Co., South Omaha, Neb	C W Zaring, Jacksonville, Fla.
Official sample..	Cudahy Blood and Bone	6.30	6.40	8.95	6.80	.....	Cudahy Packing Co., South Omaha, Neb	
Official sample..	Cudahy Pulverized Bone	4.21	12.22	16.18	3.10	.....	Cudahy Packing Co,, South Omaha, Neb	
Official sample..	No. 1 Fruit and Vine	8.76	6.28	0.89	4.76	11.01	E O Painter & Co , Jacksonville, Fla	
Official sample..	Blood and Bone	7.73	5.62	4.42	9.69	.....	Cudahy Packing Co., South Omaha, Neb	
Official sample..	Canada Unleached Ashes	5.12	.....	.....	.....	0.39	Imported by Wilson & Toomer, Jacksonville, Fla	
Official sample..	Bowker's Vegetable Grower	7.13	8.77	2.23	3.33	10.47	Bowker Fertilizer Co., Elizabethport, N J	
Official sample..	Dissolved Bone Black	9.77	17.40	1.27	.....	.....	Williams & Clark, New York	
Special sample.	Cotton Seed Meal		.....	.....	8.00	.....		J D Price, McIntosh, Fla.
Official sample..	No. 1 Peruvian Fish and Guano Mixture	7 63	5.00	4.73	5.10	4.48	Florida Fert. Manufact'ng Co, Gainesville, Fla	
Official sample.	Orange Mixture No. 2	8.23	6 40	2.55	1.36	10 28	Florida Fert. Manufact'ng Co, Gainesville, Fla	
Official sample..	Canada Hardwood Ashes	8.63	.....	.....	.....	2.74	Imported by C R Tysen, Jacksonville, Fla	
Official sample..	Hardwood Ashes	10.63	....	.....	.....	1.18	Brown Seed Store, New Albany, Ind	
Special sample..	Cypress Ashes	0.00	.....	.....	.....	1.49		E O Painter & Co, Jacksonville Fla.
Official sample..	Acid Phosphate	14.69	13.05	1.28	.....	.....	Standard Fertilizer Co, Charleston, S C	
Official sample..	Ground Fish	7.05	3.97	3.83	11.22	.....	Florida Fert. Manufact'ng Co, Gainesville, Fla	
Official sample..	Ideal Vegetable	9.46	6.01	1.28	4.59	8.40	Wilson & Toomer, Jacksonville, Fla	
Official sample..	Dissolved Bone	10.08	17.14	0.64	.....	.....	H J Baker & Bro, New York	
Official sample..	H G Acid Phosphate	14.57	13.17	1.40	.....	.....	Wilson & Toomer, Jacksonville, Fla	
Special sample..	Cotton Seed Meal	.....	.....	.....	9.35	.....	Jacksonville Oil Mill Co, Jacksonville, Ala	G P Ide, Jacksonville
Official sample..	High Grade Blood and Bone	6.87	3.53	3.46	.....	.....	Wilson & Toomer, Jacksonville, Fla	
Official sample..	Strawberry Special	13.25	8.13	1.02	3.06	3.88	Wilson & Toomer, Jacksonville, Fla	

Official sample..	Pig's Foot Brand Blood and Bone	7.21	3.01	3.07	5.78	.....	Wilson & Toomer, Jacksonville, Fla	
Special sample..	Hardwood Ashes	5.11	.....	.....	.....	4.19		Wilson & Toomer, Jacksonville, Fla
Official sample..	H G Sulphate Potash	1.77	.....	.....	.....	45.76	Imported by Wilson & Toomer, Jacksonville, Fla	
Official sample..	Double Manure Salts	4.61	.....	.....	.....	26.67	Imported by Wilson & Toomer, Jacksonville, Fla	
Official sample..	Nitrate of Soda	1.34	.....	.....	17.34	.....	Imported by E O Painter & Co, Jacksonville Fla	
Official sample..	Nitrate of Soda	0.12	.....	.....	16.32	.....	Imported by Wilson & Toomer, Jacksonville, Fla	
Official sample..	Sulphate of Ammonia	.....	.....	.....	24.48	.....	Imported by Wilson & Toomer, Jacksonville, Fla	
Official sample..	Seminole Tobacco Dust	15.27	.....	.....	2.55	7.86	Imported by Wilson & Toomer, Jacksonville, Fla	
Official sample..	Cotton Seed Meal	7.61	.....	.....	8.74	1.77	International Oil Co, Selma, Ala	
Special sample..	Cotton Seed Meal	.....	.....	.....	8.76	.....	Jacksonville Oil Mill Co, Jacksonville, Ala	
Official sample..	Sulphate of Ammonia	2.00	.....	.....	24.48	.....	Imported by C R Tysen, Jacksonville, Fla	
Official sample..	Muriate of Potash	4.83	.....	.....	.....	42.66	Imported by C R Tysen, Jacksonville, Fla	
Special sample..	German Kainit	3.49	.....	.....	.....	12.41		C R Tysen, Jacksonville.
Special sample..	Phosphate Rock	.....	.....	33.26	.....	.....		C B Vanness, Arlington, Fla.
Special sample..	Hardwood Ashes	11.19	.....	.....	.....	1.11		E O Painter & Co, Jacksonville, Fla.
Official sample..	Mapes' Vegetable	7.52	4.74	4.98	5.44	4 44	Mapes Formula and Peru. Guano Co, Newark, N J	
Official sample.	Nitrate of Soda	1.70	.....	.....	18 36	.....	Imported by C R Tysen, Jacksonville, Fla	
Special sample..	Sulphate of Potash	1.61	.....	.....	.....	48.44		F E Oblinger, Winter Haven, Fla.
Official sample..	Strawberry Fruiter	6.55	5.44	2.68	2.55	9.76	Florida Fert. Manufact'ing Co, Gainesville, Fla..	
Official sample..	Fish and Potash	6.98	2.69	2.81	7.82	5.63	Florida Fert. Manufact'ng Co, Gainesville, Fla..	
Special sample..	Stable Manure	10.60	.....	trace	1.19	0.43		W G Powell, Jacksonville, Fla.
Special sample..	Dissolved Animal Bone	11.69	9.39	6.46	3.23	.....		E E Cannon, Gainesville, Fla.
Special sample..	Soft Phosphate No. 1	.....	.....	0.20	.....	.....		J E Ingraham, St. Augustine, Fla.
Special sample..	Soft Phosphate No. 2	.....	.....	0.00	.....	.....		J E Ingraham, St. Augustine, Fla.
Special sample..	Soft Phosphate No. 3	.....	.....	trace	.....	.....		J E Ingraham, St. Augustine, Fla.
Special sample..	Halpitokee Hard Phosphate	.....	.....	1.00	.....	.....		J E Ingraham, St. Augustine, Fla.
Special sample..	Sodium Nitrate	.....	.....	.....	17.34	.....		Wilson & Toomer, Jacksonville, Fla
Special sample..	Hardwood Ashes	2 55	.....	.....	.....	1.12		T A Carroll, Gainesville, Fla.

Fertilizers.

The report of the State Chemist sets forth in detail the work done in the Laboratory as to the analyses of commercial fertilizers, soils, rocks, clays, waters, etc., for which no charge has been made. Any farmer, merchant or any one else having anything to be analyzed has had such work done as promptly as possible and with no other cost than that of postage or expressage.

I would especially call attention to the report of the State Chemist as to much of the work done in the Laboratory which has been and will be of benefit to farmers and fruit growers. He has also given advice as to the value of linseed meal, cotton seed meal, wheat bran as stock foods, and besides, he has done a good deal of work in adjusting differences between the dealers in fertilizers and fertilizing material and the manufacturers and parties furnishing such material. All of this work, as is hereafter stated, has been at no cost to the parties interested.

The State Chemist also sets forth the amount of work done outside of the Laboratory in the way of traveling over the State taking samples of commercial fertilizers and looking out for violators of the law. From this statement can be seen that the State has been very thoroughly canvassed by him. No charge has been made by the State Chemist for his railroad fare, hotel bills or in doing this work, hence I would request an allowance of five or six hundred dollars be set apart out of the money arising from the sale of fertilizer stamps to cover traveling expenses of the Chemist, and his Assistant, or if the salary of the Assistant was put in the appropriation at eighteen hundred dollars per annum, it would be the same as allowing six hundred dollars for traveling expenses, as the assistant is now paid twelve hundred dollars per annum.

Since the law was changed requiring all moneys to be paid direct to the Treasurer, and only paid out under special appropriation upon warrant of the Comptroller, no detailed account has been kept as to expenditures of this branch of the department, but every account for printing, postage, chemicals, Laboratory, clerk hire, etc., has been paid under approved accounts by warrants on the Comptroller as vouchers for the different expenditures.

The following is a statement of the receipts from sales of fertilizers for each month during the years 1897–1898:

JANUARY 1897.

Total number tons of fertilizer inspected during month, 6,339, of which 6,035 tons were commercial fertilizers, and 304 tons cotton seed meal.

Amount of tax at 25 cents per ton, $1,584.75.

Amount deposited with State Treasurer, as per receipts, $1,584.75.

Number inspection labels issued during month, 68,130.

FEBRUARY 1897.

Total number tons of fertilizer inspected during month, 5,351.70, of which 4,509.70 tons were commercial fertilizers, and 842 tons cotton seed meal.

Amount of tax at 25 cents per ton, $1,337.93.

Amount deposited with State Treasurer as per receipts, $1,337.93.

Number inspection labels issued during month, 62,310.

MARCH 1897.

Total number tons of fertilizers inspected during month, 3,127, of which 2,584 tons were commercial fertilizers, and 543 tons cotton seed meal.

Amount of tax at 25 cents per ton, $781.75.

Amount deposited with State Treasurer, as per receipts, $781.75.

Number inspection labels issued during month, 38,361.

APRIL 1897.

Total number tons of fertilizer inspected during month, 915 of which 605 tons were commercial fertilizers, and 310 tons cotton seed meal.

Amount of tax at 25 cents per ton, $228.75.

Amount deposited with State Treasurer, as per receipts, $228.75.

Number inspection labels issued during month, 12,850.

MAY 1897.

Total number tons of fertilizer inspected during month, 668, of which 428 tons were commercial fertilizers, and 240 tons cotton seed meal.

Amount of tax at 25 cents per ton, $167.00.

Amount deposited with State Treasurer, as per receipts, $167.00.

Number inspection labels issued during month, 9,876.

JUNE 1897.

Total number tons of fertilizer inspected during month, 1,390, of which 1,090 tons were commercial fertilizers, and 300 tons cotton seed meal.

Amount of tax at 25 cents per ton, $347.50.

Amount deposited with State Treasurer, as per receipts, $347.50.

Number inspection labels issued during month, 18,620.

JULY 1897.

Total number tons of fertilizer inspected during month, 1,060, of which 600 tons were commercial fertilizers, and 460 cotton seed meal.

Amount of tax at 25 cents per ton, $265.00.

Amount deposited with State Treasurer, as per receipts, $265.00.

Number inspection labels issued during month, 16,300.

AUGUST 1897.

Total number tons of fertilizer inspected during month, 225, of which 165 tons were commercial fertilizers, and 60 tons cotton seed meal.

Amount of tax at 25 cents per ton, $56.25.

Amount deposited with State Treasurer, as per receipts, $56.25.

Number of inspection labels issued during month, 2,850.

SEPTEMBER 1877.

Total number tons of fertilizer inspected during month, 1,073, of which 903 tons were commercial fertilizers, and 170 tons cotton seed meal.

Amount of tax at 25 cents per ton, $268.25.

Amount deposited with State Treasurer, as per receipts, $268.25.

Number of inspection labels issued during month, 13,116.

OCTOBER 1897.

Total number tons of fertilizer inspected during month, 1,450, of which 1,320 tons were commercial fertilizers, and 130 tons cotton seed meal.

Amount of tax at 25 cents per ton, $362.50.

Amount deposited with State Treasurer, as per receipts, $362.50.

Number inspection labels issued during month, 16,800.

NOVEMBER 1897.

Total number tons of fertilizer inspected during month, 2,194, of which 1,689 tons were commercial fertilizers, and 505 tons cotton seed meal.

Amount of tax at 25 cents per ton, $548.50.

Amount deposited with State Treasurer, as per receipts, $548.50.

Number inspection labels issued during month, 27,920.

DECEMBER 1897.

Total number tons of fertilizer inspected during month, 4,093.50, of which 3,584.50 tons were commercial fertilizers, and 509 tons cotton seed meal.

Amount of tax at 25 cents per ton, $1,023.38.

Amount deposited with State Treasurer, as per receipts, $1,023.38.

Number of inspection labels issued during month, 49,263.

GRAND TOTAL.

Number tons of fertilizer inspected during year 1897, 27,886.20, of which 23,513.20 tons were commercial fertilizers, and 4,373 tons cotton seed meal.

Amount of tax on same at 25 cents per ton, $6,971.56.

Number inspection labels issued during year, 336,396.

JANUARY 1898.

Total number tons of fertilizer inspected during month, 7,392.90, of which 6,842.90 tons were commercial fertilizers, and 550 tons cotton seed meal.

Amount of tax at 25 cents per ton, $1,848.22.

Amount deposited with State Treasurer, as per receipts, $1,848.22.

Number inspection labels issued during month, $80,554.

FEBRUARY 1898.

Total number tons of fertilizer inspected during month, 5,101, of which 4,751 tons were commercial fertilizers, and 350 tons cotton seed meal.

Amount of tax at 25 cents per ton, $1,275.25.

Amount deposited with State Treasurer, as per receipts, $1,275.25.

Number inspection labels issued during month, 57,090.

MARCH 1898.

Total number tons of fertilizer inspected during month, 4,450, of which 3,865 tons were commercial fertilizers, and 585 tons cotton seed meal.

Amount of tax at 25 cents per ton, $1,112.50.

Amount deposited with State Treasurer, as per receipts, $1,112.50.

Number inspection labels issued during month, 51,485.

APRIL 1898.

Total number tons of fertilizer inspected during month, 533, of which 233 tons were commercial fertilizers, and 300 tons cotton seed meal.

Amount of tax at 25 cents per ton, $133.25.

Amount deposited with State Treasurer, as per receipts, $133.25.

Number inspection labels issued during month, 8,820.

MAY 1898.

Total number tons of fertilizer inspected during month, 162, of which 102 tons were commercial fertilizers, and 60 tons cotton seed meal.

Amount of tax at 25 cents per ton, $40.50.

Amount deposited with State Treasurer, as per receipts, $40.50.

Number inspection labels issued during month, 2,816.

JUNE 1898.

Total number tons of fertilizer inspected during month, 740, of which 640 tons were commercial fertilizers, and 100 tons cotton seed meal.

Amount of tax at 25 cents per ton, $185.00.

Amount deposited with State Treasurer, as per receipts, $185.00.

Number inspection labels issued during month, 9,760.

JULY 1898.

Total number tons of fertilizer inspected during month, 380, of which 200 tons were commercial fertilizers, and 180 tons cotton seed meal.

Amount of tax at 25 cents per ton, $95.00.

Amount deposited with State Treasurer, as per receipts, $95.00.

Number inspection labels issued during month, 6,060.

AUGUST 1898.

Total number tons of fertilizer inspected during month, 263.50, of which 90 tons were commercial fertilizers, and 173.50 tons cotton seed meal.

Amount of tax at 25 cents per ton, $65.88.

Amount deposited with State Treasurer, as per receipts, $65.88.

Number inspection labels issued during month, 4,550.

SEPTEMBER 1898.

Total number tons fertilizer inspected during month, 713.25, of which 673.25 tons were commercial fertilizers, and 40 tons cotton seed meal.

Amount of tax at 25 cents per ton, $178.31.

Amount deposited with State Treasurer, as per receipts, $178.31.

Number inspection labels issued during month, 10,090.

OCTOBER 1898.

Total number tons of fertilizer inspected during month, 1,323, of which 843 tons were commercial fertilizers, and 480 tons cotton seed meal.

Amount of tax at 25 cents per ton, $330.75.

Amount deposited with State Treasurer, as per receipts, $330.75.

Number inspection labels issued during month, 18,578.

NOVEMBER 1898.

Total number tons fertilizer inspected during month, 1,946.38, of which 1,656.38 tons were commercial fertilizers, and 290 tons cotton seed meal.

Amount of tax at 25 cents per ton, $486.59.

Amount deposited with State Treasurer, as per receipts, $486.59.

Number inspection labels issued during month, 26,460.

DECEMBER 1898.

Total number tons fertilizer inspected during month, 2,342.13, of which 2,182.13 tons were commercial fertilizers, and 160 tons cotton seed meal.

Amount of tax at 25 cents per ton, $585.53.

Amount deposited with State Treasurer, as per receipts, $585.53.

Number inspection labels issued during month, 29,628.

Grand Total.

Number tons of fertilizer inspected during year 1898, 25,347.16, of which 22,078.66 tons were commercial fertilizers, and 3,268.50 tons cotton seed meal.

Amount of tax on same at 25 cents per ton, $6,336.78.

Number inspection labels issued during year, 305,891.

State Prison.

All persons convicted of offenses in the County Criminal Courts of Record and in the seven Circuit Courts of the State of Florida during the year 1897, and sentenced to confinement at hard labor in the State Prison, were worked by Hon. E. B. Bailey, Messrs. T. G. and J. A. Cranford, and Messrs. West Bros., and their sub-lessees, under a contract made with them by the Board of Commissioners of State Institutions, January 1, 1894. These contracts all expired January 1, 1898, and by the direction of the Legislature of 1897, the said State Board of Commissioners of State Institutions entered into a new contract with Messrs. A. H. West, of Madison, Fla.; R. J. Knight, of Crystal River, Fla.; S. L. Varnadoe, of Winn, Fla., and W. N. Camp, of Albion, Fla., to take all persons sentenced by the different courts of Florida to imprisonment at hard labor in the State Prison, for four years, commencing January 1, 1898, each contractor giving bond for five thousand dollars for the faithful performance of his contract, and agreeing to pay to the State Treasurer, annually, the sum of five thousand, two hundred and fifty dollars, payable on the first days of January and July of each year, being a total of twenty-one thousand dollars per year. The prisoners are taken at the various county jails and the State is at no expense for such prisoners after sentence is pronounced. This last contract is dated May 22, 1897, as it was of that date that the Legislature directed the Board of Commissioners of State Institutions to make the contract for the hire of State convicts for the period of four years commencing January 1, 1898.

Some of the contractors, where lease expired December 31, 1897, are still due part of the amount agreed to pay, which will be adjusted this year.

The prisoners have been worked during the past two years in the mining of phosphate and the manufacture of naval stores, by the different contractors and their sub-contractors. Following the various tables showing ages, sex, etc., will be found reports from nearly every convict camp as well as from the chaplain.

Complaints having been made by citizens of some of the counties in which the convicts were worked, the Commissioner of Agriculture requested the judges of the Circuit Courts of the several circuits where there were convicts, to direct the grand juries of the counties to investigate the treatment of convicts. The Judges kindly called the atten-

tion of the grand juries of the counties of Citrus, Lafayette, and Washington to this matter and investigations were made which resulted in much good to the prisoners and will cause the parties who work convicts to be more careful in the future.

It is earnestly desired that the next Legislature will authorize the employment by the Governor, Board of State Institutions, or Commissioner of Agriculture of a responsible man to visit each place where convicts are worked, monthly, and report upon each camp as to treatment of prisoners, their health and all other matters pertaining to their care, custody and maintenance. This agent could also attend to the business of looking after the pardon or commutation of deserving prisoners, as did the late Col. W. R. Moore. The salary of this agent or officer should be such a sum as would justify the employment of an intelligent and competent man. These reports should be made to the Governor or Commissioner of Agriculture, and by them reported to the Board of Commissioners of State Institutions.

The convict camps at Call, Fla., worked by Capt. J. D. Johnson; Wetappo, Fla., worked by Messrs. J. A. Donolson & Co.; at Cook, Fla., and at Buckhorn, Fla., worked by Messrs. Saunders & Rose, were discontinued last fall.

The various tables and reports following this show everything so fully that there is no need to make further comment.

Table No. 1.

Convicts on hand January 1, 1897	656
Convicts committed during year	360
Recaptured during year	4
Total	1,020

Convicts discharged by expiration of sentence	251
Convicts pardoned during year	6
Convicts died during year	29
Convicts escaped during year	37
Convicts discharged for new trial	4
Convicts committed to asylum	1
Convicts remaining on hand December 31, 1897	692
Total	1,020

Table No. 2.

Showing Nativity, Sex and Color of Convicts Committed During Year 1897.

Florida	157
Georgia	72
North Carolina	28
South Carolina	18
Alabama	28
Tennessee	5
Virginia	6
Texas	1
Mississippi	4
Louisiana	2
Pennsylvania	3
Missouri	4
Maryland	1
Delaware	1
Oregon	1
New York	4
Massachusetts	2
Illinois	1
West Indies	4
Austria	1

Cuba	9
England	2
Bahama Islands	1
Ireland	2
Germany	1
Georgetown, B. G	1
N. Wales	1
Total	360

Natives	338
Foreign born	22

White males	57
Colored males	288
Colored females	14
White females	1

Table No. 3.

Crimes for Which Sentenced During Year 1897.

Breaking and entering	93
Murder	23
Assault to murder	31
Cheating	1
Fraudulently altering mark on animal	1
Larceny (animal)	5
Larceny (cow)	2
Larceny (hogs)	4
Larceny	20
Second larceny	20
Grand larceny	34
Robbery	4
Bigamy	2
Burglary	5
Obtaining property under false pretense	4
Obstructing railroad train	1
Larceny (logs)	1
Receiving stolen goods	3
Murder (second degree)	2
Forgery	4
Entering building	35

Lewd and lascivious cohabitation	6
Arson	9
Attempt at arson	1
Resisting officer	2
Fraudulently altering mark on hogs	1
Manslaughter	8
Extortion of money	1
Polygamy	2
Driving cattle on railroad track	2
Rape	1
Assault to rape	7
Perjury	4
Assisting prisoners to escape	1
Embezzlement	2
Second (grand larceny)	1
Keeping gambling room	4
Procuring female for prostitution	1
Assault to commit manslaughter	1
Obtaining money under false pretense	1
Entering railroad car	1
Robbery from the person	2
Uttering forged instrument	2
Attempt at breaking and entering	1
Not given	4
Total	360

TABLE 4.

TERM OF IMPRISONMENT OF CONVICTS COMMITTED DURING YEAR 1897.

1 month	3
3 months	7
4 months	6
5 months	2
6 months	39
7 months	4
8 months	4
9 months	7
1 year	92
1 year and 2 months	1
1 year and 3 months	2
1 year and 4 months	1

1 year and 6 months	8
1 year and 7 months	1
1 year and 8 months	2
2 years	46
2 years and 1 month	1
2 year and 6 months	4
3 years	22
3 years and 2 months	2
3 years and 6 months	1
4 years	3
5 years	28
5 years and 2 months	3
6 years	4
6 years and 6 months	2
7 years	3
8 years	5
9 years	1
10 years	16
11 years	1
12 years	1
15 years	7
17 years	1
19 years	1
20 years	4
Life	21
Not given	4
Total	360

Table 5.

Age of Prisoners Committed During Year 1897.

10 years	1
12 years	4
13 years	3
14 years	8
15 years	11
16 years	8
17 years	22
18 years	19
19 years	30
20 years	24
21 years	22

22 years	28
23 years	23
24 years	24
25 years	17
26 years	15
27 years	18
28 years	11
29 years	5
30 years	8
31 years	1
32 years	4
33 years	5
34 years	5
35 years	6
36 years	4
37 years	1
39 years	3
40 years	3
41 years	2
44 years	2
45 years	6
46 years	1
47 years	2
48 years	3
49 years	2
50 years	2
51 years	1
53 years	1
55 years	1
56 years	1
57 years	1
60 years	1
64 years	3
65 years	1
66 years	1
67 years	1
Total	360

Table No. 6.

Pardoned During Year 1897.

Name.	Color.	Crime.	Term.	Sentenced.		Pardoned.
				When.	County Where.	
Charlie Smith	Black	Robbery	Life	Feb. 13, 1892	Brevard	June 11, 1897.
Sam Pearson	Brown	Robbery	Life	Feb. 13, 1892	Brevard	June 11, 1897.
Robert Grant	Black	Manslaughter	Five Years	May 2, 1895	Duval	June 1, 1897.
Willie Baker	Brown	Grand Larceny	Five Years	May 19, 1896	Suwannee	May 26, 1897.
O. E. Ringland	White	Grand Larceny	Two Years	June 23, 1897	Duval	Aug 25, 1897.
Jim Gaiters	Yellow	Robbery	Two Years	July 14, 1897	Escambia	Nov 5, 1897.

Table No. 7.

Escaped During Year 1897.

Name.	Age.	Color.	Crime.	Term.	Sentenced. When.	Sentenced. County Where	Escaped.
Green Anderson..	58 years	Black..	Rape.....	Life.....	April 13, 1887....	Gadsden	Nov 1897.
Parmer Williams.	22 years	Black..	Murder	Life.....	Mch 20, 1888....	St. Johns.....	July 20, 1897.
Jno B Riley.....	36 years	White .	Murder.....	Life.....	April 27, 1889....	Volusia.	Dec 30, 1897.
Robert Perkins...	20 years	Brown.	Breaking and entering	20 years	Jan 13, 1891....	Leon	May 7, 1897.
Ben Bess.....	41 years	Yellow.	Murder.....	Life.....	Feb 4, 1892....	Hamilton	Aug 18, 1897.
Enoch Hamilton	48 years	Black..	Murder.....	Life.....	Feb 25, 1893.....	Jackson	Mch 1897.
Hardy A Blocker	28 years	White .	Murder	Life.....	Nov 11, 1893....	Orange.....	July 27, 1897.
Bill Chapman....	25 years	Black..	Robbery	5 years	Dec 6, 1893....	Leon	Aug 23, 1897.
Jas Anderson....	28 years	Yellow.	Murder.....	Life.....	April 16, 1894 ...	Putnam	April 13, 1897.
Frank Bradley...	39 years	Yellow.	Assault to murder.....	20 years	April 30, 1894....	Duval	June 15, 1897.
John Reed.	32 years	Yellow.	Murder.....	Life.....	May 28, 1894...	Columbia..	June 1897.
Henry Frazier ...	23 years	Brown.	Second larceny.....	7 years	Aug 29, 1894.....	Duval....	May 7, 1897.
Gus Stafford.....	21 years	Brown.	Robbery.....	10 years	Dec 20, 1894....	Alachua	April 28, 1897.
James Paine.....	25 years	Brown.	Breaking and entering	6 yrs 9 m	April 24, 1895.....	Duval	Aug 18, 1897.
Spencer Bell	21 years	Brown.	Murder.....	Life.....	Aug 13, 1895....	Clay.....	April 28, 1897.
Will White.....	27 years	Yellow.	Murder.....	Life	Oct 21, 1895....	Marion..... ...	June 29, 1897.
W F Middleton..	28 years	Brown.	False pretense.....	6 years	Nov 18, 1895....	Suwannee	June 12, 1897.
Will Brown.....	24 years	Yellow.	Murder.....	Life.....	Dec 4, 1895....	Levy.....	July 19, 1897.
Robt Caldwell....	24 years	Brown.	Breaking and entering	4 years	Mch 9, 1896....	Escambia.	Dec 28, 1897.
G W Swayne....	43 years	Brown.	Forgery	2 years	April 9, 1896....	Marion	July 29, 1897.
Jas Henderson....	26 years	Brown.	Breaking and entering	5 years	April 22, 1896.....	Volusia..... ...	June 11, 1897.
Udie Roberts.....	19 years	Brown	Assault to murder.....	10 years	May 15, 1896 ...	Suwannee	April 28, 1897.
Thos Kemp	22 years	Brown.	Breaking and entering	15 years	May 15, 1895 ...	Suwannee	July 16, 1897.
Chas Burden....	23 years	Brown.	Assault to murder.....	10 years	May 19, 1896 ...	Suwannee	April 28, 1897.

Ben Johnson	35 years	Brown.	Grand larceny	2 years	May 19, 1896	Duval	April 28, 1897.
John Howard	28 years	Brown.	Larceny	2 years	June 15, 1896	Jackson	April 28, 1897.
Henry Jones	23 years	Brown.	Breaking and entering	3 yrs 6 m	Aug 25, 1896	Putnam	April 28, 1897.
Walter Munroe	23 years	Brown.	Arson	5 years	Oct 24, 1896	Madison	April 10, 1897.
Henry Scott	23 years	Yellow.	Breaking and entering	2 yrs 3 m	Oct 27, 1896	Duval	June 1, 1897.
Lena Hayes	19 years	Brown	Murder second degree	Life.	Dec 7, 1896	Leon	June 15, 1897.
Clarence Kreger	30 years	White .	Breaking and entering	2 years	Dec 5, 1896	Dade	Sept 23, 1897.
Jas J Johnson	24 years	White .	Breaking and entering	3 years	Mch 5, 1897	Putnam	Nov 15, 1897.
Jno Johnson, alias Will Jones	30 years	Brown.	Assault to murder	10 years	Mch 5, 1897	Putnam	Aug 11, 1897.
Alonzo Caruthers.	18 years	Brown.	Breaking and entering	9 months	Mch 19, 1897	Bradford	Nov 22, 1897.
Arthur Harris	21 years	White .	Breaking and entering	1 year	April 28, 1897	Putnam	Sept 1897.
Wm Jackson	35 years	Yellow.	Assault to murder	5 yrs 60 da	May 14, 1897	Suwannee	May 29, 1897.
Birt Snell	29 years	White .	Maint'g gambling house	2 years	Dec 5, 1895	Duval	July 1897.

Table No. 8.

Died During Year 1897.

Name.	Color.	Crime.	Term.	Sentenced.		Died.	Disease.
				When.	County Where.		
Daniel Blake	Black	Murder	Life	Mch 16, 1880	St. Johns	Jan 7, 1897	Not given.
Tony Godwin	Black	Murder	20 years	Nov 16, 1889	Suwannee	May 11, 1897	Not given.
Lige Selph	Black	Breaking and Entering	10 years	Dec 15, 1891	Volusia	——— 1897	Not given.
George Stewart	Black	Breaking and Entering	10 years	May 16, 1893	Alachua	Ju e 10, 1897	Not given.
Adam Hicks	Black	Aiding Prisoner to Escape	5 years	Sept 1, 1894	Hamilton	June 19, 1897	Not given.
John Dorsey	Brown	Rape	Life	Sept 6, 1894	Hamilton	Mch 2, 1897.	Not given.
Nathan Lyons	Red	Breaking and Entering	8 years	Feb 15, 1895	Lake	March 1897	Not given.
John Lester, alias Chas Harrison	White	Breaking and Entering	11 years	Nov 10, 1894	St. Johns	Oct 7, 1897	Heart disease.
Wade Sheppard	Brown	Arson	7 years	June 28, 1895	Putnam	March 1897	Killed by guard, tried to escape.
John Carlton	Brown	Assault to Rape	20 years	Oct 15, 1895	Hillsboro	Feb 9, 1897	Not given.
Dave Young	Black	Assault to Murder	2½ years	Jan 1, 1896	Duval	Mch 12, 1897	Not given.
Joe Murdock	Black	Breaking and Entering	5 years	Jan 8, 1896	Citrus	Feb 14, 1897	Not given.
Moses Warren	Brown	Breaking and Entering	2 years	April 8, 1895	Marion	June 9, 1897	Not given.
John Hebbens	Brown	Lewdly Cohabiting	2 years	July 16, 1896	Monroe	Feb 25, 1897	Not given.
George Burdon	Yellow	Larceny	3 years	Aug 28, 1896	Duval	July 19, 1897	Killed by guard, tried to escape.
Charles Wright	Brown	Breaking and Entering	10 years	Sept 16, 1896	Escambia	June 2, 1897	Not given.
Geo. Washington	Yellow	Breaking and Entering	1 year	Oct 26, 1896	Marion	July 17, 1897	Not given.
Joseph Bronsen	Brown	Second Larceny	6 months	Oct 28, 1896	Duval	Jan 28, 1897	Not given.
Sam Burch	Brown	Perjury	5 years	Oct 31, 1896	Hamilton	Jan 15, 1897	Not given.

Walter L Chamberlain	White	Attempt to commit Robbery	3 years	Nov 6, 1896	Duval	July 21, 1897	Not given.
Willie Williams	Brown	Assault to murder	5 years	Nov 20, 1896	Suwannee	Mch 8, 1897	Killed by guard, tried to escape.
Allen Anderson	Brown	Breaking and Entering	1 year	Dec 5, 1896	Leon	July 7, 1897	Killed by car.
John Turner	Brown	Breaking and Entering	2½ years	Mch 8, 1797	Putnam	Sept 30, 1897	Dropsy of heart.
Willie Lawson	Black	Breaking and Entering	4 months	Mch 19, 1897	Duval	May 16, 1897	Not given.
Charles Ross	Black	Entering without Breaking	1 year	Mch 22, 1897	Marion	Dec 1, 1897	From an old burn.
Henry Mason	Black	Breaking and Entering	6 months	May 26, 1897	Washington	Oct 8, 1897	Congest'n of brain
James Jones	White	Murder 1st Degree	Life	June 12, 1897	Lafayette	Oct 23, 1897	Not given.
Sandy Saunders	Black	Assault to Murder	6 months	Nov 4, 1897	Lake	Dec 4, 1897	Not given.
Arthur Daughtry	White	Larceny of Animal	2 years	Aug 5, 1897	DeSoto	Dec 8, 1897	Not given.

Table No. 9.

Convicts on hand January 1, 1898	692
Convicts committed during the year	334
Recaptured during year	7
Total	1,033

Convicts discharged by expiration of sentence	237
Convicts pardoned during year	15
Convicts died during year	40
Convicts escaped during year	21
Convicts discharged for new trial	1
Convicts committed to Asylum	2
Convicts remaining on hand December 31, 1898	717
Total	1,033

Table No. 10.

Nativity, Sex and Color of Convicts Committed During Year 1898.

Florida	158
Georgia	61
Virginia	5
North Carolina	16
South Carolina	28
Alabama	19
West Indies	14
New York	2
Germany	2
Arkansas	2
Cuba	2
Maryland	1
Tennessee	3
Illinois	2
Texas	1
Not given	3
Denmark	1
Pennsylvania	3
Italy	1
Mississippi	4

District of Columbia	1
Australia	1
Maine	1
France	1
Iowa	1
Ohio	1
Total	334

Foreign born	22
Natives	312

White males	50
Colored males	269
White females	2
Colored females	13
Total	334

Table No. 11.

Crimes for which Committed During Year 1898.

Assault to murder	45
Second larceny	21
Murder	20
Entering building	22
Entering rail road car	3
Breaking and entering	76
Resisting officer	4
Larceny domestic animal	7
Lewd and lascivious behavior	10
Larceny	6
Embezzlement	5
Grand larceny	30
Not given	16
Bigamy	2
Larceny (hog)	3
Receiving stolen goods	3
Manslaughter	10
Larceny (cows)	9
Uttering forgery	4
Larceny (horse)	3

Forcibly assisting prisoner to escape	1
Assault to rape	3
Robbery by armed person	1
Obstructing railroad track	1
Driving cattle on railroad track	4
Attempt to corrupt juror	1
Keeping gambling room	1
Arson	2
Assault to rob	2
Obtaining property under false pretenses	1
Robbery	3
Entering vessel	1
Forgery	2
Larceny (logs)	1
Burglary	5
Imputing want of chastity to married female	1
Common and notorious thief	1
Entering	1
Poisoning drink	1
Obtaining money onder false pretenses	1
Rape	1
Total	334

TABLE NO. 12.

TERMS OF SENTENCE OF CONVICTS COMMITTED DURING YEAR 1898.

2 months	5
3 months	10
4 months	5
6 months	18
7 months	1
8 months	8
9 months	1
1 year	80
1 year and 1 month	1
1 year and 2 months	5
1 year and 3 months	1
1 year and 6 months	4
1 year and 8 months	2
2 years	45
2 years and 1 month	1
2 years and 6 months	1
3 years	16

4 years	3
5 years	37
5 years and 2 months	1
6 years	3
6 years and 2 months	1
7 years	6
8 years	5
9 years	2
10 years	26
12 years	1
12 years and 8 months	1
14 years	1
15 years	13
18 years	2
20 years	7
40 years	1
Life	14
Not given	6
Total	334

Table No. 13.

Age of Convicts Committed During Year 1898.

11 years	1
12 years	1
13 years	1
14 years	5
15 years	8
16 years	18
17 years	21
18 years	26
19 years	14
20 years	22
21 years	29
22 years	13
23 years	17
24 years	10
25 years	13
26 years	8
27 years	10
28 years	11
29 years	8
30 years	9

31 years	8
32 years	8
33 years	3
34 years	6
35 years	9
36 years	6
37 years	4
38 years	1
39 years	3
40 years	2
41 years	2
42 years	4
43 years	2
44 years	1
45 years	3
47 years	3
48 years	3
49 years	4
50 years	2
51 years	3
53 years	4
55 years	4
58 years	2
62 years	1
67 years	1
Total	334

Table No. 14.

Pardoned During the Year 1898.

Name.	Color.	Crime.	Term.	Sentenced.		Pardoned.
				When.	County Where.	
Wm Willingham	White	Murder, 1st degree	Life	July 19, 1884	Polk	May 3, 1898
Lewis Mitchell	Copper	Assault to robbery	Life	April 10, 1891	Hillsboro'	April 11, 1898
Belford E Branch	White	Murder	Life	Nov. 11, 1893	DeSoto	Jan. 24, 1898
Fred Thompson	White	Assault to rape	20 years	Mch. 17, 1894	Hillsboro'	Feb. 8, 1898
David Y Russell	White	Assault to rape	15 years	Mch. 27, 1895	Polk	July 5, 1898
A J Messer	White	Breaking and entering	4 years	Nov. 30, 1895	Jackson	July 5, 1898
Rose Borders	Brown	Breaking and entering	1 year	June 12, 1897	Jackson	March 16, 1898
John F Drew	White	Larceny	2 years	Oct. 26, 1896	Clay	June 3, 1898
James Condon	White	Keeping gambling room	1 year	Sept. 11, 1897	Duval	April 14, 1898
John Hendry, alias Tobe Hendry	White	Larceny of cattle	1 year	Oct. 29, 1896	DeSoto	Feb. 7, 1898
Francisco Hernandez Gonzalez	White	Grand larceny	1 year	Nov. 10, 1897	Monroe	May 23, 1898
Miguel Perez	White	Grand larceny	1 year	Nov. 10, 1897	Monroe	May 23, 1898
Frank Wynn	Brown	Murder	2 years	Nov. 29, 1897	Jackson	Sept. 30, 1898
Louis McHenry	White	Assault to murder	1 year	May 5, 1898	Walton	Nov. 30, 1898
A C Toll	White	Keeping gambling room	2 yrs. 1 mo.	July 1, 1898	Duval	Sept. 30, 1898

Table No. 15.

Died During Year 1898.

Name.	Color.	Crime.	Term.	Sentenced. When.	Sentenced. County Where.	Died.	Disease.
Wade Sheppard....	Brown..	Rape.....	Life.....	Nov 11, 1892	St. Johns.....	Aug 24, 1898	Killed by guard while trying to escape.
Giles English.....	Black..	Murder.....	Life.....	July 17, 1893	Brevard.....	Dec 24, 1898	Not given.
Laborn Brown	White..	Murder.....	Life.....	Oct 28, 1893	Walton	Jan 1, 1898	Not given.
John Alva.....	Black..	Assault to murder.... ...	7 years.....	Nov 10, 1893	St. Johns.....	Aug 19, 1898	Not given.
Thomas Wilson	Yellow.	Grand larceny.....	5 years.....	Aug 31, 1894	Duval	Nov 5, 1898	Syphilis.
Robt Dennison, Jr..	Brown..	Murder	5 years.....	Oct 19, 1894	Marion..	July 22, 1898	Not given.
James E. Miller. ..	Brown..	Burglary.....	10 years ...	Nov 15, 1894	Lee.....	Aug 28, 1898	Not given.
William Dixon	White..	Murder, 2d degree.....	Life.....	Dec 16, 1893	Lafayette ...	Nov 28, 1898	Pneumonia.
Elbert Jones.....	White.	Murder	Life.....	July 26, 1895	Hamilton.....	Aug 9, 1898	Caught between cars.
William Johnson..	Brown..	Breaking and entering....	15 years....	Nov 13, 1895	Suwannee....	Feb 4, 1898	Not given.
Needham Rouse....	Brown.	Assault to murder	5 years.....	Feb 9, 1896	Duval.... ...	April 20, 1898	Not given.
John Mills	Black...	Assault to murder.....	7 years.....	May 19, 1896	Suwannee....	July 1, 1898	Not given.
Russell Clausell...	Brown.	Breaking and entering....	2 years.....	May 18, 1896	Escambia	Jan 16, 1898	Piles and stricture.
John Hudgens.....	Black..	Arson	6 years... ...	Nov 29, 1898	Jackson.....	Dec 18, 1898	Not given.
Robt Bowles..	Black..	Second larceny..	2½ years ...	Oct 29, 1896	Duval.....	Aug 9, 1898	Not given.
Ed Corney.....	Brown..	Perjury.....	3 years,...	Nov 28, 1896	Columbia	July 30, 1898	Not given.
Charlie Lawsen.....	Brown..	Second larceny.....	2 years....	Dec 8, 1896	Duval...	June 5, 1898	Not given.
Daniel Deval.	Black..	Grand larceny.....	3 years.....	Jan 11, 1897	Monroe.....	Mch 7, 1898	Killed by guard while trying to escape.
William Jones... ..	Brown..	Assault to murder.....	3 years....	Mch 25, 1897	Lake.	Oct 12, 1898	Killed by car.

Jim Gaston.....	Brown .	Assault to rape.....	20 years....	July	27, 1897	Escambia . . .	Aug	13, 1898	Syphilis.
John Johnson	Brown..	Assault to murder.....	15 years....	Aug	27, 1897	Duval.....	June	29, 1898	Killed by bank caving in.
Geo Washington..	Black ..	Breaking and entering....	1 year.....	Oct	5, 1897	Duval	July	30, 1898	Not given.
Edward Campbell.	Black ..	Grand larceny.....	5 years....	Oct	15, 1897	Volusia	Nov	5, 1898	Not given.
Isaiah Larkin... ..	Yellow.	Murder 1st degree.....	Life...	Oct	16, 1897	Madison.....	Feb	5, 1898	Not given.
Ben Williams... ..	Black ..	Larceny hogs.....	1 year	Oct	5, 1897	Marion..	July	10, 1898	Not given.
Benjamin Grice....	White..	Larceny domestic animal	2 years....	Oct	26, 1897	DeSoto.... ..	Oct	11, 1898	Not given.
Silas Washington..	Brown .	Breaking and entering....	6½ years....	Nov	4, 1897	Nassau..	June	22, 1898	Killed by guard while trying to escape.
Tom Johnson.....	Yellow.	Second larceny	4 years....	Nov	8, 1897	Escambia	July	10, 1898	Dropsy.
Geo Cummings ..	Brown..	Breaking and entering....	1 year.....	Dec	7, 1897	Leon....	May	23, 1898	Not given.
Will Melton	White .	Murder 1st degree.....	Life.....	Feb	3, 1898	Hamilton	May	7, 1898	Killed by guard while trying to escape.
George Cooper	Brown..	Assault to murder.....	10 years.....	Feb	2, 1898	Escambia	June	17, 1898	Killed by guard while trying to escape.
Evarista Reys de Jesus	White .	Larceny second offense....	5 years....	Mch	29, 1898	Hamilton . .	June	1, 1898	Killed by guard while trying to escape.
Monick Alexander..	Black ..	Assault to murder.....	3 months ..	April	25, 1898	Leon.	May	28, 1898	Killed by guard while trying to escape.
Alex Thompson.....	Black .	Breaking and entering....	18 months..	May	19, 1898	Washington..	June	21, 1898	Not given.
P G Bowles	White .	Driving cattle on R R track	2½ years ...	June	23, 1898	Jackson..	Nov	24, 1898	Chronic Dysentery—stomach ulcers.
Geo Goodloe	Yellow .	Larceny..	5 years ...	July	18, 1898	Escambia. ...	Nov	21, 1898	Killed by bank caving in.
M L Womsley.....	White .	Murder 1st degree	Life....	Oct	31, 1898	Marion.... ...	Nov	9, 1898	Driving nail through parotic artery.
Wm Blair	Black ..	Assault to murder.....	5 years ...	Nov	2, 1898	Gadsden.	Dec	7, 1898	Killed by bank caving in.
Bryant Mosely	Brown..	Larceny cow.....	2 yrs 60 dys.	Nov	17, 1898	Suwannee....	Nov	—, 1898	Not given.
Geo Snider	White .	Breaking and entering ...	1 year ..	Nov	23, 1898	Levy	Dec	6, 1898	Not given.

Table No. 16.

Escaped During Year 1898.

Name.	Age.	Color.	Crime.	Term.	Sentenced. When.	Sentenced. County Where.	Escaped.
James Yates	22 years	White..	Murder	Life	Feb 18, 1891	Osceola	Dec 2, 1898
Edward Jackson	24 years	Black...	Murder	Life	Jan 1, 1893	Hillsborough..	Aug 21, 1898
Frank Williams	29 years	Brown..	Breaking and entering	5 years	Dec 1, 1894	Levy	Jan 1, 1898
Sol Holly	23 years	Brown..	Assault to murder	15 years	May 28, 1895	Alachua	June 1, 1898
Daniel Washington	19 years	Cream..	Murder	Life ..	Oct 11, 1895	Madison	Aug 21, 1898
Frank Farmer	33 years	Brown..	Assault to murder	10 years	Dec 21, 1895	Alachua	Aug 25, 1898
Samuel Jewett	23 years	Black ..	Highway robbery	2½ years	Oct 30, 1896	Duval	April 16, 1898
Austin Williams	18 years	Brown..	Assault to murder	20 years	Nov 12, 1896	Lee	Aug 18, 1898
Burley Jones	20 years	Brown..	Murder	10 years	Feb 13, 1897	Escambia	April 9, 1898
Burrell Marshall	51 years	Black ..	Receiving stolen goods.	5 years	April 10, 1897	Gadsden	Nov 5, 1898
John Campbell	24 years	Brown..	Second larceny	7 years	June 8, 1897	Duval	April 9, 1898
Wiley Williams alias Wild Bill	25 years	Black ..	Breaking and entering	2½ years	Aug 13, 1897	Volusia	Nov 4, 1898
Albert Bryant	27 years	Black ..	Grand larceny	18 mos..	Aug 25, 1897	Duval	Jan 18, 1898
John House	18 years	Black ..	Second larceLy	5 years	Oct 5, 1897	Duval	May 8, 1898
John Wright alias John Walker	66 years	White..	Grand larceny	2 years	Oct 26, 1897	Duval	Feb 5, 1898
Geo Washington	35 years	Black ..	Larceny	1 yr 8 m	Nov 29, 1897	Jackson	Mch 16, 1898
Geo Robinson alias Blaney Robinson	20 years	Black ..	Second larceny	6 years	Dec 7, 1897	Duval	April 9, 1898
Jeff Bird	36 years	Brown..	Grand larceny	2 years	Mch 21, 1897	Hillsborough..	Aug 20, 1898
Lewis Bradfield	36 years	Yellow.	Breaking and entering	1 year..	May 19, 1898	Suwannee	Nov 3, 1898
A B Williams	40 years	Black ..	Embezzlement	1 year..	July 11, 1898	Monroe	Dec 30, 1898
Joe Simmons	25 years	Brown..	Assault to murder	15 years	Dec 30, 1897	Leon	Aug 8, 1898

AMOUNT DISTRIBUTED NOVEMBER, 1898, UNDER SECTION 11, CHAPTER 4324, LAWS OF FLORIDA.

Alachua	$ 381 51
Baker	16 20
Bradford	91 62
Brevard	97 20
Calhoun	16 20
Citrus	64 80
Clay	142 92
Columbia	396 63
Dade	194 40
DeSoto	44 10
Duval	1,822 50
Escambia	763 56
Franklin	78 48
Gadsden	209 43
Hamilton	287 37
Hernando	32 40
Hillsborough	859 14
Holmes	95 67
Jackson	489 06
Jefferson	92 25
Lafayette	48 60
Lake	171 09
Lee	36 54
Leon	361 98
Levy	94 86
Liberty	16 20
Madison	187 92
Manatee	16 20
Marion	415 35
Monroe	312 21
Nassau	193 32
Orange	231 39
Osceola	33 96
Pasco	52 38
Polk	184 95
Putnam	335 43
St. Johns	101 07
Santa Rosa	195 12
Sumter	145 80
Suwannee	426 60
Taylor	16 20
Volusia	378 81
Wakulla	16 20
Walton	138 69
Washington	129 87
Total	$10,416 18

REPORT OF CHAPLAIN.

BUCKHORN, FLA., January 1, 1899.

HON. L. B. WOMBWELL,

Commissioner of Agriculture, Tallahassee, Fla.:

SIR—In 1897 I visited all camps except the one at Palatka every nine weeks, and I went to that one twice, and the reason I did not visit it oftener, it was about one hundred miles extra travel.

There were fifteen camps besides the one at Palatka, and there were only sixteen men at that camp at that time. So you see that I preached between eighty-five and ninety-five sermons.

The health of the camps in 1897 was very good, and they seemed to be very well cared for. The example that Capt. Hillman has laid before the lessees and contractors in general has been of great benefit to the prisoners, relative to their bedding, clothing and feeding of them.

In 1898 there were seventeen camps, and I visited all of the camps the first quarter, preaching twice at all camps; the second quarter I preached to thirteen camps, omitting the ones in West Florida; to each of the larger camps I preached twice as I went around.

The third quarter I visited all camps as usual, every nine weeks, excepting the ones in West Florida. The fourth quarter I visited all camps and started to West Florida, but was informed that they had been removed, all excepting Myers' camp, and there were only eighteen men in that camp, and owing to the distance, I turned back at Mayo.

In 1898 I preached ninety-four sermons. The health of the men in 1898 was good, and on my last round was very good, excepting at one of Mr. Camp's camps, and the religious impression seemed to be very good.

I suppose there were between twenty and thirty true conversions during the two years.

I traveled during 1897 and 1898, at a rough estimate, between four thousand and five hundred and five thousand miles.

This I respectfully submit to you.

Yours truly,

REV. V. A. HERLONG,

Per R. W. H.

REPORT OF R. W. STEELE.

BUCKHORN, FLA., January 1, 1899.

To L. B. WOMBWELL,

Commissioner of Agriculture, Tallahassee, Fla.:

SIR—I have the honor to report as follows:

I worked 47 convicts at Buckhorn, Fla., in the manufacture of naval stores for Saunders & Rose, during the year 1898.

During that period I had in all 47 prisoners, of which there were 31 colored males, 2 colored females and 14 white males.

During that time 24 were discharged by expiration of sentence or order of court; 4 were pardoned and 1 (Burwell Marshall) escaped.

The condition of the prisoners during the past year has been very good.

Twenty of the above were taken from Buckhorn to Buttgenbach camp at Cordele, Fla., December 24.

R. W. STEELE,
Manager.

REPORT OF J. R. SAUNDERS.

COOK, FLA., January 1, 1899.

To L. B. WOMBWELL,

Commissioner of Agriculture, Tallahassee, Fla.:

SIR—I have the honor to report as follows:

I worked 39 convicts at Cook, Fla., in the business of J. R. Saunders turpentine works, during the year 1898.

During that period I had in all 39 prisoners, of which there were 34 colored males, 1 colored female and 4 white males.

During that time 14 were discharged by expiration of sentence or order of court; 2 died.

The condition of the prisoners during the past year has been good.

The remaining 23 were moved from Cook, Fla., December 24th and delivered to Camp Phosphate Company, at Dunnellon, Fla.

J. R. SAUNDERS,
Manager.

REPORT OF J. CAMP.

DUNNELLON, January 1, 1899.

To L. B. WOMBWELL,

Commissioner of Agriculture, Tallahassee, Fla.:

SIR—I have the honor to report as follows:

I worked 40 convicts at Dunnellon and Floral City, in the business of mining phosphate rock, during the year 1898.

During that period I had in all, 40 prisoners, of which there were 38 colored males and 2 white males.

During that time 6 were discharged by expiration of sentence or order of court; 1 died and 2 escaped.

The condition of the prisoners during the past year has been very good.

JACK CAMP,
Manager.

REPORT OF G. W. VARN.

MAYO, January 1, 1899.

To L. W. WOMBWELL,

Commissioner of Agriculture, Tallahassee, Fla.:

SIR—I have the honor to report as follows:

I worked 30 to 35 convicts at Dudleyville, in the business of manufacturing of naval stores, during the year 1898.

During that period I had in all, 50 prisoners, of which there were 47 colored males, 1 colored female and 2 white males.

During that time there were discharged by expiration of sentence 13, 1 pardoned, 1 escaped and 1 adjudged insane.

The condition of the prisoners during the past year has been very good.

Prisoners have been in good health all the year and none of them has given any trouble whatever.

G. W. VARN,
Manager.

REPORT OF C. A. NEEL.

WADE, FLA., January 1, 1899.

To L. B. WOMBWELL,

Commissioner of Agriculture, Tallahassee, Fla.:

SIR—I have the honor to report as follows:

I worked 130 convicts at Dutton and Wade, in the business of mining phosphate rock, during the year 1898.

During that period I had in all 130 prisoners, of which there were 100 colored males, 5 colored females, and 25 white males.

During that time 48 were discharged by expiration of sentence or order of court, 5 were pardoned, 6 died and 2 escaped.

The condition of the prisoners during the past year has been very good.

Part of the year the convicts were worked in two mines near Dutton and part of the year at two mines near Wade.

C. A. NEEL,
Manager.

REPORT OF W. J. HILLMAN.

FLORAL CITY, FLA., January 1, 1899.

To L. B. WOMBWELL,

Commissioner of Agriculture, Tallahassee, Fla.:

SIR—I have the honor to report as follows:

I worked seventy-nine convicts at Floral City, in the business of turpentine, during the years 1897 and 1898.

During that period I had in all 79 prisoners, of which there were 78 colored males and 1 colored female.

During that time 10 were discharged by expiration of sentence or order of court, and 2 were pardoned.

The condition of the prisoners during the past two years has been good. Yours very truly,

W. J. HILLMAN,
Manager.

REPORT OF DONALSON & CO.

WETAPPO, FLA., January 1, 1899.

To L. B. WOMBWELL,

Commissioner of Agriculture, Tallahassee, Fla.:

SIR—I have the honor to report as follows:

We worked 25 convicts at Wetappo, in the business of turpentine, during the year 1898.

During that period we had in all 25 prisoners, of which there were 23 colored males, 1 colored female and 2 white males.

During that time 7 were discharged by expiration of sentence or order of court, 5 died and 2 escaped.

The condition of the prisoners during the past year has been very good.

DONALSON & CO.,
Managers.

REPORT OF JOHNSON & ROSE.

PADGETT, FLA., January 1, 1899.

To L. B. WOMBWELL,

Commissioner of Agriculture, Tallahassee, Fla.:

SIR—We have the honor to report as follows:

We worked 106 convicts at Padgett, in the business of naval stores, etc., during the years from November 1, 1897 and 1898. During that period we had in all 106 prisoners, of which there were 90 colored males, 2 colored females and 14 white males.

During that time 30 were discharged by expiration of sentence or order of court, 7 died, 2 tried to escape and were killed by guards, and 2 escaped.

The condition of the prisoners during the past year has been very good, and must say that, notwithstanding the number of invalids, cripples and old chronics that were forced on us in the general division of January, 1898, the general health of our camp is good and death rate very small.

JOHNSON & ROSE.
Managers.

REPORT OF A. A. MYERS.

TOMPKINS, FLA., January 1, 1899.

To L. B. WOMBWELL,

Commissioner of Agriculture, Tallahassee, Fla.:

SIR—We have the honor to report as follows:

We worked 86 convicts at Lake Butler and Tompkins, in the business of turpentine, during the years 1897 and 1898.

During that period we had in all 86 prisoners, of which there were 79 colored males and 7 white males.

During that time 22 were discharged by expiration of sentence or order of court, and 5 died.

The condition of the prisoners during the past two years has been very good.

Of the 86 prisoners, 31 were turned back to State in January, 1898, and we drew 25 new ones. We have 28 on roll now, 3 over our number. All are well and at work, except Bob Mathis, who cut his foot and will have to lie in for a day or so.

Yours, etc.,

THE MYERS TURP'T CO.
A. A. MYERS, Manager.

REPORT BY J. BUTTGENBACH.

CORDEAL, FLA., January 1, 1899.

To L. B. WOMBWELL,

Commissioner of Agriculture, Tallahassee, Fla.:

SIR—I have the honor to report as follows:

I worked 71 convicts at Floral City, in the business of phosphate mining, during the year 1898. During that period, I had in all 71 prisoners, of which there were 60 colored males and 11 white males.

During that time 11 were discharged by expiration of sentence or order of court, 2 were pardoned, 1 died and 3 escaped.

The condition of the prisoners during the past year has been very satisfactory, both physically and morally.

J. BUTTGENACH,
Manager.

REPORT OF J. BUTTGENBACH.

CORDEAL, FLA., January 1, 1899.

To L. B. WOMBWELL,

Commissioner of Agriculture, Tallahassee, Fla.:

SIR—I have the honor to report as follows:

I worked 82 convicts at Hartshorn, Fla., in the business of phosphate mining, during the year 1898.

During that period I had in all 82 prisoners, of which there were 58 colored males, 3 colored females, 20 white males and 1 white female.

During that time 12 were discharged by expiration of sentence or order of court; 1 pardoned, 7 died and 1 escaped.

The condition of the prisoners during the past year has been very satisfactorily, both physically and morally.

J. BUTTGENBACH,
Manager.

REPORT OF A. P. MALLOY.

SUMMERFIELD, FLA., January 1, 1899.

To L. B. WOMBWELL,

Commissioner of Agriculture, Tallahassee, Fla.:

SIR—I have the honor to report as follows:

I worked 78 convicts at Summerfield, in the business of manufacturing naval stores, during the year 1898.

During that period I had in all 78 prisoners, of which there were 64 colored males, 5 colored females and 9 white males.

During that time 20 were discharged by expiration of sentence or order of court, 1 was pardoned, 1 died and 2 escaped, and one of them was captured.

The condition of the prisoners during the past year has been better than usual. The main sickness we have to contend with is bilious attacks. We have to give quite a lot of them blood medicines to keep their blood in condition, as they have old cases of different kinds that return occasionally.

Respectfully,

A. P. MALLOY,
Manager.

REPORT OF T. G. & J. A. CRANFORD.

CRYSTAL RIVER, FLA., January 1, 1899.

To L. B. WOMBWELL,

Commissioner of Agriculture, Tallahassee, Fla.:

SIR—We have the honor to report as follows:

We worked during the year 1897, including the camps of our sub-lessees, in Alachua, Bradford, Citrus, Lafayette and Sumter counties, in the business of manufacturing naval stores:

Total number of convicts on hand January 1, 1897..	224	...
Total number of convicts received during 1897.....	112	...
Total number of deaths during year 1897.....	...	15
Total number of escapes during year 1897.....	...	6
Total number of pardons during year 1897.....	...	2
Total number discharged by expiration of sentence..	...	73
Total number on hand January 1, 1898.....	...	240
	336	336

T. G. & J. A. CRANFORD,
BY R. J. KNIGHT.

AGRICULTURAL STATISTICS

FOR THE

Years 1897 and 1898.

NO. 1. FIELD CROPS.

COUNTIES.	COTTON, (Upland.)		
	Acres.	Bales.	Value.
Alachua			
Baker			
Bradford			
Brevard			
Calhoun	1,343	430	10,750 00
Citrus			
Clay			
Columbia			
Dade			
DeSoto			
Duval	25	27	1,400 00
Escambia	357	146	3,650 00
Franklin			
Gadsden	4,424	1,471	36,314 00
Hamilton	44	13	377 00
Hernando			
Hillsborough			
Holmes	2,020	1,255	30,375 00
Jackson	32,079	10,693	374,255 00
Jefferson	35,306	11,265	250,958 00
Lafayette			
Lake			
Lee			
Leon	29,890	10,990	384,650 00
Levy			
Liberty	133	72	2,022 00
Madison	3,592	1,242	30,875 00
*Manatee			
Marion			
*Monroe			
*Nassau			
Orange			
Osceola			
Pasco			
Polk			
Putnam			
St. Johns			
Santa Rosa	248	75	1,390 00
Sumter			
Suwannee			
Taylor			
*Volusia			
Wakulla	796	291	7,247 00
Walton	3,634	912	19,479 00
Washington	2,143	651	18,593 00
Total	116,034	39,533	1,172,335 00

*Not reported.

NO. 1. FIELD CROPS—Continued.

COUNTIES.	COTTON (Sea Island.)		
	Acres.	Bags.	Value.
Alachua	7,471	1,560	$66,526 00
Baker	4,464	1,129	63,310 00
Bradford	5,970	1,717	68,690 00
Brevard			
Calhoun	16	5	150 00
Citrus	45	17	1,000 00
Clay	243	201	2,654 00
Columbia	15,160	2,773	117,496 00
Dade			
DeSoto			
Duval	34	14	611 00
Escambia			
Franklin			
Gadsden	3,129	862	26 755 00
Hamilton	13,841	3 059	122,710 00
Hernando			
Hillsborough			
Holmes	300	75	3,000 00
Jackson	1,653	551	27,550 00
Jefferson	258	70	2,790 00
Lafayette	320	804	4,225 00
Lake	190	13	982 00
Lee			
Leon	11	4	165 00
Levy	1,787	385	15,400 00
Liberty			
Madison	19,755	3,404	167,035 00
*Manatee			
Marion	2,794	761	31,706 00
*Monroe			
*Nassau			
Orange			
Osceola			
Pasco			
Polk			
Putnam	1,664	699	38,100 00
St. Johns			
Santa Rosa			
Sumter			
Suwannee	17,084	3 670	150,190 00
Taylor	1,667	379	9,214 00
*Volusia			
Wakulla	91	31	924 00
Walton			
Washington			
Total	97,947	22,143	891,143 00

*Not reported.

NO. 1. FIELD CROPS—Continued.

COUNTIES.	CORN.		
	Acres.	Bushels.	Value.
Alachua	23,201	233,060	125,988 00
Baker	7,837	85,607	63,917 00
Bradford	10,191	101,901	50,955 00
Brevard	142	4,525	2 675 00
Calhoun	7,010	75,055	37,573 00
Citrus	4,247	55,159	30,404 00
Clay	2,327	22,665	11,333 00
Columbia	25,997	205,595	103,163 00
Dade	.....	.....	.....
DeSoto	3,750	38,858	38,858 00
Duval	2,211	25,745	12,894 00
Escambia	2,145	26,900	20,175 00
Franklin	152	1,500	1,230 00
Gadsden	11,137	116,496	56,823 00
Hamilton	19,418	148,281	74,637 00
Hernando	3,200	38,055	19,830 00
Hillsborough	6,119	58,909	31,614 00
Holmes	6,750	33,750	16,875 00
Jackson	44,695	446,980	223,495 00
Jefferson	43,908	316,594	150,670 00
Lafayette	20,405	178,015	125,012 00
Lake	4,316	38,663	19,608 00
Lee	84	2,130	1,642 00
Leon	45,980	475,880	237,940 00
Levy	7,073	60,045	30,022 00
Liberty	2,687	26,700	12,276 00
Madison	40,130	361,237	178,342 00
*Manatee	.....	.....	.....
Marion	11,914	156,515	78,258 00
*Monroe	.....	.....	.....
*Nassau	.....	.....	.....
Orange	1,630	18,105	9,166 00
Osceola	1,614	15,435	8,117 00
Pasco	5,901	56,890	56,790 00
Polk	7,849	79,720	58,008 00
Putnam	15,004	148,434	74,503 00
St. Johns	3,531	45,585	14,734 00
Santa Rosa	4,333	57,969	33,799 00
Sumter	3,928	33,415	20,896 00
Suwannee	27,791	264,720	132,360 00
Taylor	5,806	40,046	28,643 00
*Volusia	.....	.....	.....
Wakulla	10,150	84,680	42,365 00
Walton	8,174	72,129	36,069 00
Washington	8,537	81,653	40,644 00
Total	459,078	4,334,530	2,205,543 00

*Not reported.

NO. 1. FIELD CROPS—Continued.

COUNTIES.	OATS.		
	Acres.	Bushels.	Value.
Alachua	2,563	26,921	$ 12,949 00
Baker			
Bradford			
Brevard			
Calhoun	823	11,650	4,695 00
Citrus	929	14,340	11,940 00
Clay	157	1,290	645 00
Columbia	5,012	35,789	21,318 00
Dade			
DeSoto	24	368	153 00
Duval	52	729	473 00
Escambia	334	5,138	2,569 00
Franklin			
Gadsden	3,096	33,905	17,092 00
Hamilton	1 499	13,497	6.714 00
Hernando	420	5.960	2.885 00
Hillsborough	157	2,061	1,311 00
Holmes	500	2,500	1,250 00
Jackson	3,109	31.090	15,545 00
Jefferson	2,036	18,674	10,052 00
Lafayette	1,410	11.018	5,853 00
Lake	151	1,189	526 00
Lee	4	170	85 00
Leon	3.480	41.760	25.056 00
Levy	1,732	16,850	8,425 00
Liberty	792	7,990	4,136 00
Madison	9,544	78,197	38,552 00
*Manatee			
Marion	8,224	42,310	21,155 00
*Monroe			
*Nassau			
Orange	38	470	190 00
Osceola	20	400	120 00
Pasco	764	9.070	2,770 00
Polk	110	1.318	650 00
Putnam	3.677	27,711	16,017 00
St. Johns	812	11,835	6,848 00
Santa Rosa	125	2.811	1.401 00
Sumter	991	7,785	4,639 00
Suwannee	6,630	66,150	33.075 00
Taylor	439	4,050	2,943 00
*Volusia			
Wakulla	512	5,840	2.923 00
Walton	241	2,049	1,025 00
Washington	391	8,444	4,153 00
Total	55.697	551.329	290.127 00

*Not Reported.

NO. 1. FIELD CROPS—Continued.

COUNTIES.	SWEET POTATOES.		
	Acres.	Bushels.	Value.
Alachua	404	43,855	17,295 00
Baker	384	71,567	11,207 00
Bradford	457	118,180	29,140 00
Brevard	166	23,155	11.485 00
Calhoun	881	36,355	18,238 00
Citrus	347	51,160	25.920 00
Clay	198	30,090	12,036 00
Columbia	713	70,149	23,944 00
Dade			
DeSoto	805	153,244	51,246 00
Duval	716	68,063	18,081 00
Escambia	992	74,820	37,410 00
Franklin	55	11,000	5,500 00
Gadsden	1,559	62,505	30,162 00
Hamilton	415	43,589	17.486 00
Hernando	314	36,220	18,090 00
Hillsborough	628	103,121	56,089 00
Holmes	500	5,000	2,500 00
Jackson	463	93,318	37,327 00
Jefferson	1,188	76,811	26,922 00
Lafayette	1,202	96,407	33,674 00
Lake	474	37.086	16.947 00
Lee	83	13,006	5,870 00
Leon	4,870	199,800	61,440 00
Levy	362	37,700	9,415 00
Liberty	177	11,905	4.470 00
Madison	1,416	79,554	23,335 00
*Manatee			
Marion	1,379	103,250	51,615 00
*Monroe			
*Nassau			
Orange	645	59,953	29.241 00
Osceola	402	43,815	17,600 00
Pasco	802	75,040	38,410 00
Polk	809	94,124	30,697 00
Putnam	1,141	100,943	24,030 00
St. Johns	455	30,125	13.205 00
Santa Rosa	794	41,175	22,115 00
Sumter	195	21,085	7,655 00
Suwannee	545	55,048	22.922 00
Taylor	111	10,719	6,655 00
*Volusia			
Wakulla	159	33,221	16,627 00
Walton	212	22,785	11,393 00
Washington	559	62.210	31,660 00
Total	27,377	2,400,471	949.290 00

*Not reported.

NO. 1. FIELD CROPS—Continued.

COUNTIES.	SUGAR CANE.				
	Acres	Bbls Syrup	Value.	Sugar (pounds.)	Value.
Alachua	83	756	$8,675 00	9,900	$215 00
Baker	186	1,895	18,950 00	87,550	3,922 00
Bradford	305	4,072	40,720 00		
Brevard					
Calhoun	130	1,887	11,454 00		
Citrus	98	659	12,660 00	600	36 00
Clay	49	323	2,909 00	9,200	276 00
Columbia	384	2,798	20,613 00	15,850	9 2 00
Dade					
DeSoto	396	2,170	31,907 00	107,235	4,2 2 00
Duval	303	1,127	12,202 00	10 426	399 00
Escambia	83	390	7,800 00		
Franklin	37	253	2,032 00		
Gadsden	1,644	22,989	177,893 00		
Hamilton	245	2,048	16,533 00	17,800	895 00
Hernando	152	1,092	9,562 00	6,250	323 00
Hillsborough	240	2,062	21,349 00	1,000	50 00
Holmes	600	3,000	27,000 00	1,200	60 00
Jackson	359	5,171	31,026 00		
Jefferson	628	4,190	24,583 00	2,100	91 00
Lafayette	364	3,675	23,645 00		
Lake	98	480	6,149 00	130	39 00
Lee	50	244	4,870 00	250	13 00
Leon	815	4,980	49,800 00	6,490	260 00
Levy	133	852	9,520 00		
Liberty	70	1,252	9,986 00	4,222	126 00
Madison	478	3,754	31,122 00		
*Manatee					
Marion	656	4,462	44,620 00	40,900	2,454 00
*Monroe					
*Nassau					
Orange	94	674	9,096 00	200	12 00
Osceola	422	726	8,697 00	200 000	6,000 00
Pasco	232	2,155	19,390 00		
Polk	136	854	9,193 00	4,100	208 00
Putnam	324	1,995	18,680 00		
St. Johns	312	3,390	28,810 00		
Santa Rosa	100	920	14,070 00		
Sumter	74	435	6,440 00		
Suwannee	372	2,677	26,770 00	4,300	215 00
Taylor	53	512	4,125 00		
*Volusia					
Wakulla	111	1,350	11,156 00		
Walton	97	1,201	11,078 00		
Washington	212	1,607	15,074 00		
Total	9,122	95,477	830,160 00	508,803	$20,788 00

*Not reported.

NO. 1. FIELD CROPS—Continued.

COUNTIES.	RICE.		
	Acres.	Bushels.	Value.
Alachua	18	321	$ 365 00
Baker			
Bradford	3	25	50 00
Brevard			
Calhoun			
Citrus	19	600	600 00
Clay	1	9	9 00
Columbia	52	647	355 00
Dade			
DeSoto	752	5,741	7,184 00
Duval	31	506	574 00
Escambia	8	185	185 00
Franklin			
Gadsden	628	10,915	5,389 00
Hamilton	11	167	167 00
Hernando	35	1,010	1,110 00
Hillsborough	49	1,266	1 928 00
Holmes	200	1,600	800 00
Jackson	88	880	880 00
Jefferson	10	94	94 00
Fafayette	10	185	185 00
Lake	8	91	130 00
Lee	10	566	1,132 00
Leon	23	490	490 00
Levy			
Liberty	23	2,544	2,490 00
Madison			
*Manatee			
Marion	1,393	43,630	34,630 00
*Monroe			
*Nassau			
Orange	5	122	215 00
Osceola	6	295	940 00
Pasco	802	3,635	5,290 00
Polk	85	1,509	1.551 00
Putnam	92	1,334	2 233 00
St. Johns			
Santa Rosa	35	455	455 00
Sumter			
Suwannee	72	1,151	1,151 00
Taylor			
*Volusia			
Wakulla	1	25	25 00
Walton	127	825	825 00
Washington	127	2,070	1.698 00
Total	3.621	73.739	73.130 00

*Not reported.

NO. 1. FIELD CROPS—Continued.

COUNTIES.	FIELD PEAS.		
	Acres.	Bushels.	Value.
Alachua	233	1,525	1.335 00
Baker	2,154	18,690	18,688 00
Bradford	....	.....	.....
Brevard	101	3,620	6,170 00
Calhoun	48	480	350 00
Citrus	1,038	16,180	12,950 00
Clay	15	287	317 00
Columbia	882	4.108	4,093 00
Dade	.....	.....	.....
DeSoto	653	7,006	8,849 00
Duval	82	2,848	1,384 00
Escambia	16	165	155 00
Franklin	72	144	144 00
Gadsden	1,377	21,710	9,424 00
Hamilton	740	7,227	7,227 00
Hernando	404	4.810	4,330 00
Hillsborough	468	3,046	4,837 00
Holmes	100	500	500 00
Jackson	1,261	12,610	6,305 00
Jefferson	402	2,654	2,417 00
Lafayette	1 840	5.800	5 800 00
Lake	393	2,258	2 220 00
Lee	47	1,538	3,052 00
Leon	653	6,530	8,160 00
Levy	95	950	1,250 00
Liberty	534	5,693	2,073 00
Madison	.....	.....	.....
*Manatee	.....	.....	.....
Marion	501	3,590	5,120 00
*Monroe	.....	.....	.....
*Nassau	.....	.....	.....
Orange	386	3,806	514 00
Osceola	60	1,133	2,366 00
Pasco	539	6,770	9,210 00
Polk	875	6,196	6,350 00
Putnam	8,071	56,600	56,660 00
St. Johns	.....	.....	.....
Santa Rosa	400	4,009	4,009 00
Sumter	.....	.....	.....
Suwannee	2,020	20,200	20,200 00
Taylor	55	590	565 00
*Volusia	.....	.....	.....
Wakulla	369	4.075	2,294 00
Walton	447	1,757	1.757 00
Washington	203	2,091	1,872 00
Total	27.429	241,286	228.604 00

*Not reported.

NO. 1. FIELD CROPS—Continued.

COUNTIES.	HAY.		
	Acres.	Tons.	Value.
Alachua	167	157	$1,570 00
Baker	18	28	455 00
Bradford			
Brevard			
Calhoun			
Citrus	119	135	1,635 00
Clay	30	34	685 00
Columbia	49	53	540 00
Dade			
DeSoto	190	333	3,330 00
Duval	111	150	1,765 00
Escambia	900	900	13,600 00
Franklin			
Gadsden	75	225	2,250 00
Hamilton			
Hernando	89	98	980 00
Hillsborough	341	323	3,815 00
Holmes	10	40	400 00
Jackson			
Jefferson	15	29	540 00
Lafayette			
Lake	588	791	7,770 00
Lee	7	7	110 00
Leon	1,180	1,410	14,100 00
Levy			
Liberty	7	2	23 00
Madison			
*Manatee			
Marion	79	4,472	89,440 00
*Monroe			
*Nassau			
Orange	756	756	7,903 00
Osceola	96	439	4,440 00
Pasco	449	786	11,780 00
Polk	353	399	8,345 00
Putnam	2,224	1,595	16,089 00
St. Johns	175	348	5,250 00
Santa Rosa	500	564	6,622 00
Sumter	52	50	840 00
Suwannee	50	85	1,350 00
Taylor			
*Volusia			
Wakulla			
Walton			
Washington	22	18	156 00
Total	8,582	10,219	$222,783 00

*Not reported.

NO. 1. FIELD CROPS—Continued.

COUNTIES.	MILLET.		
	Acres.	Tons.	Value.
Alachua			
Baker			
Bradford			
Brevard			
Calhoun			
Citrus	2	6	$ 70 00
Clay			
Columbia			
Dade			
DeSoto	3	5	90 00
Duval			
Escambia			
Franklin			
Gadsden			
Hamilton			
Hernando			
Hillsborough	6	6	90 00
Holmes			
Jackson			
Jefferson	3	6	10 00
Lafayette			
Lake			
Lee			
Leon	78	260	3,900 00
Levy			
Liberty			
Madison			
*Manatee			
Marion			
*Monroe			
*Nassau			
Orange	8	17	185 00
Osceola			
Pasco	13	21	315 00
Polk	20	21	430 00
Putnam	66	80	808 00
St. Johns			
Santa Rosa			
Sumter			
Suwannee			
Taylor			
*Volusia			
Wakulla			
Walton			
Washington			
Total	180	421	$ 5,908 00

*Not reported.

NO. 1. FIELD CROPS—Continued.

COUNTIES.	PEANUTS.		
	Acres.	Bushels.	Value.
Alachua	1,448	9,835	$7,730 00
Baker	5,336	49,325	49,325 00
Bradford			
Brevard			
Calhoun	70	975	258 00
Citrus	615	10,200	10,280 00
Clay	2	25	25 00
Columbia	4,131	74,107	71,482 00
Dade			
DeSoto	7	175	229 00
Duval	3	24	29 00
Escambia			
Franklin			
Gadsden	2,863	31,837	31,927 00
Hamilton	4,521	45,230	45,230 00
Hernando	296	4,388	4,145 00
Hillsborough	6	110	120 00
Holmes	700	10,500	10,500 00
Jackson	12,559	125,590	62,795 00
Jefferson	3,015	40,733	20,290 00
Lafayette	2,410	55,067	55,067 00
Lake	170	2,116	2,184 00
Lee			
Leon	1,400	43,310	21,655 00
Levy	2,874	28,740	14,370 00
Liberty	1,115	12,952	5,918 00
Madison			
*Manatee			
Marion	4,069	98,100	49,050 00
*Monroe			
*Nassau			
Orange	9	378	666 00
Osceola	2	35	60 00
Pasco	259	3,660	5,460 00
Polk	75	1,146	1,523 00
Putnam	1,223	11,769	11,631 00
St. Johns			
Santa Rosa	15	250	155 00
Sumter			
Suwannee	5,112	10,224	10,224 00
Taylor	1,503	20,395	14,723 00
*Volusia			
Wakulla	1,085	38,395	14,865 00
Walton	313	2,955	2,955 00
Washington	1,246	56,640	40,806 00
Total	58,452	789,287	$575,627 00

*Not reported.

NO. 1. FIELD CROPS—Continued.

COUNTIES.	TOBACCO.		
	Acres.*	Pounds.	Value.
Alachua	4	700	$210 00
Baker			
Bradford			
Brevard			
Calhoun			
Citrus	2	5,800	1,000 00
Clay	1	640	640 00
Columbia	5	32,040	5,145 00
Dade			
DeSoto	3	2,195	655 00
Duval	1	500	100 00
Escambia			
Franklin			
Gadsden	1,882	449,448	241,254 00
Hamilton			
Hernando	27	10,320	3,635 00
Hillsborough	34	18,900	8,950 00
Holmes	2	800	200 00
Jackson			
Jefferson	14	9,600	2,780 00
Lafayette	1	410	55 00
Lake	15	4,110	953 00
Lee	10	2,000	1,000 00
Leon	118	61,390	9,209 00
Levy			
Liberty	3	600	225 00
Madison			
*Manatee			
Marion	22	9,000	3,972 00
*Monroe			
*Nassau			
Orange	1	650	310 00
Osceola	33	15,525	4,247 00
Pasco	439	189,300	79,780 00
Polk	206	20,740	5,312 00
Putnam	139	50,162	13,359 00
St. Johns			
Santa Rosa	1	200	80 00
Sumter			
Suwannee			
Taylor			
*Volusia			
Wakulla			
Walton	1	195	72 00
Washington	83	12,110	5,738 00
Total	3.119	897.335	$391,911 00

*Not reported.

NO. 1. FIELD CROPS—Continued.

COUNTIES.	CASAVA.		
	Acres.	Tons.	Value.
Alachua			
Baker			
Bradford			
Brevard			
Calhoun			
Citrus			
Clay			
Columbia			
Dade			
DeSoto	11	36	$222 00
Duval			
Escambia			
Franklin			
Gadsden			
Hamilton			
Hernando			
Hillsborough			
Holmes			
Jackson			
Jefferson			
Lafayette			
Lake	11	52	289 00
Lee			
Leon			
Levy			
Liberty			
Madison			
*Manatee			
Marion			
*Monroe			
*Nassau			
Orange	1	2	20 00
Osceola	23	122	610 00
Pasco			
Polk			
Putnam			
St. Johns			
Santa Rosa			
Sumter			
Suwannee			
Taylor			
*Volusia			
Wakulla			
Walton			
Washington			
Total	46	212	$1.151 00

*Not reported.

NO. 2. VEGETABLE PRODUCTS.

COUNTIES.	IRISH POTATOES.		
	Acres.	Bushels.	Value.
Alachua	73	4,515	$3,925 00
Baker			
Bradford			
Brevard	118	7,215	42,700 00
Calhoun			
Citrus	79	7,848	9,465 00
Clay	2	215	251 00
Columbia	3	70	87 00
Dade			
DeSoto	61	2,826	5,611 00
Duval	68	3,982	3,742 00
Escambia	21	2,075	2,075 00
Franklin			
Gadsden			
Hamilton			
Hernando	7	290	340 00
Hillsborough	50	2,850	1,350 00
Holmes	20	400	200 00
Jackson			
Jefferson	75	5,000	3,000 00
Fafayette			
Lake	190	8,055	6,769 00
Lee	1	144	288 00
Leon	298	12 760	13,300 00
Levy			
Liberty			
Madison			
*Manatee			
Marion	395	28,490	30,605 00
*Monroe			
*Nassau			
Orange	94	9,827	10,194 00
Osceola	44	4,397	6,880 00
Pasco	118	7,860	8,360 00
Polk	75	7,240	4,198 00
Putnam	88	5,162	5 631 00
St. Johns	492	65,213	24,752 00
Santa Rosa	2	100	80 00
Sumter			
Suwannee			
Taylor			
*Volusia			
Wakulla			
Walton			
Washington			
Total	2,372	186,935	$233.908 00

*Not reported.

NO. 2. VEGETABLE PRODUCTS—Continued.

COUNTIES.	CABBAGE.		
	Acres.	Barrels.	Value.
Alachua	675	29,680	$31,476 00
Baker			
Bradford			
Brevard	2	160	150 00
Calhoun			
Citrus	155	20,600	18,400 00
Clay	1	25	155 00
Columbia	8	325	365 00
Dade			
DeSoto	46	1,113	3,419 00
Duval	49	3,796	3,466 00
Escambia	14	2,750	1,375 00
Franklin			
Gadsden			
Hamilton			
Hernando	19	1,070	1,760 00
Hillsborough	17	613	1,112 00
Holmes	20	1,500	4,500 00
Jackson			
Jefferson	50	250	800 00
Lafayette			
Lake	381	21,475	10,747 00
Lee	10	625	831 00
Leon	117	5,280	10,690 00
Levy			
Liberty			
Madison			
*Manatee			
Marion	907	50,080	43,609 00
*Monroe			
*Nassau			
Orange	72	3,835	3,784 00
Osceola	25	1,975	3,860 00
Pasco	125	8,080	10,650 00
Polk	33	2,430	3,388 00
Putnam	139	6,517	9,560 00
St. Johns	33	600	9,500 00
Santa Rosa	1	50	40 00
Sumter			
Suwannee			
Taylor			
*Volusia			
Wakulla			
Walton			
Washington			
Total	2,898	163,829	$173,687 00

*Not reported.

NO. 2. VEGETABLE PRODUCTS—Continued.

COUNTIES.	TOMATOES.		
	Acres.	Crates.	Value.
Alachua	154	9 280	$8,280 00
Baker			
Bradford			
Brevard	159	23,950	20,640 00
Calhoun			
Citrus	61	6 369	8,755 00
Clay	4	305	195 00
Columbia	1	15	15 00
Dade	1.097	201,495	273 975 00
DeSoto	71	6,645	5.384 00
Duval	113	8.628	5,830 00
Escambia	1	50	50 00
Franklin			
Gadsden			
Hamilton			
Hernando	14	2.460	1,450 00
Hillsborough	16	1 365	1,060 00
Holmes	1	300	150 00
Jackson			
Jefferson			
Lafayette			
Lake	478	10.719	9 809 00
Lee	219	44.685	65,445 00
Leon	75	8,130	8,520 00
Levy			
Liberty			
Madison			
*Manatee			
Marion	1,421	72.075	52.526 00
*Monroe			
*Nassau			
Orange	310	27 575	23.690 00
Osceola	18	2,007	2,009 00
Pasco	162	11,220	13.960 00
Polk	1,428	71.763	78,882 00
Putnam	226	8.694	16,769 00
St. Johns	172	22,900	43 900 00
Santa Rosa			
Sumter			
Suwannee			
Taylor			
*Volusia			
Wakulla			
Walton			
Washington			
Total	6 201	540 630	$650.894 00

*Not Reported.

NO. 2. VEGETABLE PRODUCTS—Continued.

COUNTIES.	SQUASHES.		
	Acres.	Barrels.	Value.
Alachua	31	1,610	$ 1,665 00
Baker			
Bradford			
Brevard			
Calhoun			
Citrus	22	1,406	1.963 00
Clay		3	6 00
Columbia			
Dade			
DeSoto	3	101	223 00
Duval			
Escambia	1	100	100 00
Franklin			
Gadsden			
Hamilton			
Hernando			
Hillsborough	1	175	50 00
Holmes	2	100	100 00
Jackson			
Jefferson			
Lafayette			
Lake	16	1,080	540 00
Lee	3	83	170 00
Leon	50	5,260	7,130 00
Levy			
Liberty			
Madison			
*Manatee			
Marion	70	1,645	1,985 00
*Monroe			
*Nassau			
Orange	6	187	215 00
Osceola			
Pasco	57	3.270	4,360 00
Polk	12	398	654 00
Putnam	8	325	479 00
St. Johns			
Santa Rosa			
Sumter			
Suwannee			
Taylor			
*Volusia			
Wakulla			
Walton			
Washington			
Total	272	15.743	$19.640 00

*Not reported.

NO. 2. VEGETABLE PRODUCTS—Continued.

COUNTIES.	EGG PLANTS.		
	Acres.	Barrels.	Value.
Alachua	32	1,975	$1,745 00
Baker			
Bradford			
Brevard			
Calhoun			
Citrus	12	1,146	2,248 00
Clay	1	7	29 00
Columbia			
Dade	133	5,439	28,708 00
DeSoto	19	527	1,414 00
Duval			
Escambia			
Franklin			
Gadsden			
Hamilton			
Hernando	4	150	450 00
Hillsborough	16	57	560 00
Holmes			
Jackson			
Jefferson			
Lafayette			
Lake	1	10	15 00
Lee	8	566	1,073 00
Leon	25	610	850 00
Levy			
Liberty			
Madison			
*Manatee			
Marion	14	240	640 00
*Monroe			
*Nassau			
Orange			
Osceola	25	2,675	13,375 00
Pasco	145	6,620	10,965 00
Polk	19	709	1,403 00
Putnam	90	4,205	6,047 00
St. Johns			
Santa Rosa			
Sumter			
Suwannee			
Taylor			
*Volusia			
Wakulla			
Walton			
Washington			
Total	584	24,936	$69,532 00

*Not reported.

NO. 2. VEGETABLE PRODUCTS—Continued.

COUNTIES.	CUCUMBERS.		
	Acres.	Crates.	Value
Alachua	116	7,175	$5,815 00
Baker			
Bradford			
Brevard			
Calhoun			
Citrus	39	6,720	5,115 00
Clay		5	5 00
Columbia			
Dade			
DeSoto	24	1,917	2,256 00
Duval	12	618	385 00
Escambia			
Franklin			
Gadsden			
Hamilton			
Hernando			
Hillsborough	12	1,026	915 00
Holmes	2	800	400 00
Jackson			
Jefferson			
Lafayette			
Lake	3	270	253 00
Lee	1	46	89 00
Leon	34	5,510	5,140 00
Levy	40	6,260	6,260 00
Liberty			
Madison			
*Manatee			
Marion	338	15,440	11,952 00
*Monroe			
*Nassau			
Orange	4	405	520 00
Osceola			
Pasco	150	15,490	15,360 00
Polk	5	567	637 00
Putnam	201	6,586	10,238 00
St. Johns			
Santa Rosa			
Sumter			
Suwannee			
Taylor			
*Volusia			
Wakulla			
Walton			
Washington			
Total	981	68,835	$65,340 00

*Not reported.

NO. 2. VEGETABLE PRODUCTS—Continued.

COUNTIES.	WATERMELONS.		
	Acres.	Car Loads.	Value.
Alachua	530	487	$15,315 00
Baker			
Bradford			
Brevard			
Calhoun			
Citrus	57	84	7.930 00
Clay	2	1	292 00
Columbia	29	17	1,200 00
Dade			
DeSoto	162	165	5.926 00
Duval	237	139	9.410 00
Escambia	21	18	1,800 00
Franklin			
Gadsden			
Hamilton	93	30	1,860 00
Hernando			
Hillsborough	57	33	3,275 00
Holmes	10	4	300 00
Jackson			
Jefferson	170	106	8,400 00
Lafayette			
Lake	256	109	4,794 00
Lee			
Leon	158	119	7,100 00
Levy			
Liberty			
Madison			
*Manatee			
Marion	140	147	6,120 00
*Monroe			
*Nassau			
Orange	89	85	4.415 00
Osceola	65	65	5,125 00
Pasco	46	46	4.355 00
Polk	40	18	1.280 00
Putnam	216	158	14.900 00
St. Johns	130	357	5 195 00
Santa Rosa	2	2	135 00
Sumter			
Suwannee			
Taylor			
*Volusia			
Wakulla			
Walton			
Washington			
Total	2,558	2,190	$109,087 00

*Not reported.

NO. 2. VEGETABLE PRODUCTS—Continued.

COUNTIES.	CANTALOUPES.		
	Acres.	Barrels.	Value.
Alachua	217	17,080	$15,470 00
Baker			
Bradford			
Brevard			
Calhoun			
Citrus	8	370	820 00
Clay		5	10 00
Columbia			
Dade			
DeSoto			
Duval	14	6	143 00
Escambia	1	100	100 00
Franklin			
Gadsden			
Hamilton			
Hernando			
Hillsborough			
Holmes			
Jackson			
Jefferson	25	310	465 00
Lafayette			
Lake	4	20	70 00
Lee			
Leon	47	2,110	2,870 00
Levy			
Liberty			
Madison			
*Manatee			
Marion			
*Monroe			
*Nassau			
Orange	4	180	510 00
Osceola			
Pasco	68	2,660	3,940 00
Polk			
Putnam	65	2,136	3,024 00
St. Johns			
Santa Rosa			
Sumter			
Suwannee			
Taylor			
*Volusia			
Wakulla			
Walton			
Washington			
Total	453	25,027	$27,422 00

*Not reported.

NO. 2. VEGETABLE PRODUCTS—Continued.

COUNTIES.	ENGLISH PEAS.		
	Acres.	Crates.	Value.
Alachua	35	1,990	$1,900 00
Baker			
Bradford			
Brevard			
Calhoun			
Citrus	4	240	390 00
Clay			
Columbia	13	419	584 00
Dade			
DeSoto	7	373	584 00
Duval	13	450	421 00
Escambia			
Franklin			
Gadsden			
Hamilton			
Hernando			
Hillsborough	1	91	110 00
Holmes	4	200	100 00
Jackson			
Jefferson			
Lafayette			
Lake	29	1,226	1,328 00
Lee	1	20	30 00
Leon	84	18,130	8,990 00
Levy			
Liberty			
Madison			
*Manatee			
Marion	52	1,390	4,158 00
*Monroe			
*Nassau			
Orange	1	60	100 00
Osceola	2	345	345 00
Pasco	156	16,760	16,090 00
Polk	3	105	168 00
Putnam			
St. Johns			
Santa Rosa			
Sumter			
Suwannee			
Taylor			
*Volusia			
Wakulla			
Walton			
Washington			
Total	405	41,899	$35,298 00

*Not reported.

NO. 2. VEGETABLE PRODUCTS—Continued.

COUNTIES.	BEETS.		
	Acres.	Crates.	Value.
Alachua	16	870	$460 00
Baker			
Bradford			
Brevard			
Calhoun			
Citrus	16	1,795	1,820 00
Clay			
Columbia			
Dade			
DeSoto		14	20 00
Duval			
Escambia	1	100	100 00
Franklin			
Gadsden			
Hamilton			
Hernando			
Hillsborough			
Holmes			
Jackson			
Jefferson			
Lafayette			
Lake	3	260	135 00
Lee	1	64	84 00
Leon	26	6,810	4,870 00
Levy			
Liberty			
Madison			
*Manatee			
Marion	122	4,490	4,348 00
*Monroe			
*Nassau			
Orange	5	440	460 00
Osceola			
Pasco	115	11,060	11,195 00
Polk	3	98	106 00
Putnam	89	3,627	5,837 00
St. Johns			
Santa Rosa			
Sumter			
Suwannee			
Taylor			
*Volusia			
Wakulla			
Walton			
Washington			
Total	397	29,628	$29,435 00

*Not reported.

NO. 2. VEGETABLE PRODUCTS—Continued.

COUNTIES.	BEANS.		
	Acres.	Crates.	Value.
Alachua	307	14,185	$16,523 00
Baker			
Bradford			
Brevard	670	190,565	87,745 00
Calhoun			
Citrus	61	8,250	6,035 00
Clay			
Columbia	7	210	215 00
Dade	9	1,500	3,050 00
DeSoto	305	24,494	27,552 00
Duval	61	1,966	1,497 00
Escambia	1	200	100 00
Franklin			
Gadsden			
Hamilton			
Hernando			
Hillsborough	17	1,806	1,296 00
Holmes	5	1,500	750 00
Jackson			
Jefferson			
Lafayette			
Lake	168	9,776	8,515 00
Lee	2	213	291 00
Leon	107	2,715	10,980 00
Levy			
Liberty			
Madison			
*Manatee			
Marion	856	41,655	36,683 00
*Monroe			
*Nassau			
Orange	89	3,253	3,205 00
Osceola	51	9,190	9,190 00
Pasco	325	35,890	33,890 00
Polk	89	9,154	9,348 00
Putnam	55	4,075	6,655 00
St. Johns			
Santa Rosa			
Sumter			
Suwannee			
Taylor			
*Volusia			
Wakulla			
Walton			
Washington			
Total	3,183	360,597	$264,130 00

*Not reported.

NO. 3. FRUITS.

COUNTIES.	ORANGES.			
	Bearing Trees.	Non Bearing Trees.	No. of Boxes.	Value.
Alachua	175	92,725	180	$365 00
Baker				
Bradford				
Brevard	25,060	273,555	29,115	91,080 00
Calhoun				
Citrus	92	194,410	117	313 00
Clay		16,371		
Columbia				
Dade	100	2,025	400	800 00
DeSoto	78,706	148,714	88,804	166,672 00
Duval				
Escambia				
Franklin	252	1,504		
Gadsden				
Hamilton				
Hernando	84	150,880	43	100 00
Hillsborough	72,599	263,097	55,918	117,441 00
Holmes				
Jackson				
Jefferson				
Lafayette				
Lake	4,051	594,324	4,747	9,968 00
Lee	13,582	30,409	17,947	28,031 00
Leon				
Levy		12,530		
Liberty				
Madison				
*Manatee				
Marion	2,195	301,813	1,001	3,099 00
*Monroe				
*Nassau				
Orange	24,085	1,021,960	8,257	19,510 00
Osceola	2,004	41,693	2,315	4,630 00
Pasco	490	146,470	670	1,310 00
Polk	30,880	105,011	6,000	12,000 00
Putnam	2,813	124,473	450	1,200 00
St. Johns	590	16,440	615	1,293 00
Santa Rosa				
Sumter				
Suwannee				
Taylor				
*Volusia				
Wakulla				
Walton				
Washington				
Total	257,758	3,538,404	216,579	$456,672 00

*Not Reported.

NO. 3. FRUITS—Continued.

COUNTIES.	LEMONS.			
	Bearing Trees.	Non-Bearing Trees.	No. of Boxes.	Value.
Alachua				
Baker				
Bradford				
Brevard	90	13,667	30	40 00
Calhoun				
Citrus		780		
Clay		3		
Columbia				
Dade				
DeSoto	4,762	1,965	1,420	2,007 00
Duval				
Escambia				
Franklin				
Gadsden				
Hamilton				
Hernando				
Hillsborough	228	14,495	33	85 00
Holmes				
Jackson				
Jefferson				
Lafayette				
Lake	13	8,607	11	21 00
Lee	346	431	306	243 00
Leon				
Levy				
Liberty				
Madison				
*Manatee				
Marion	200	3,150		
*Monroe				
*Nassau				
Orange		4,064		
Osceola	15	429		
Pasco				
Polk				
Putnam	5	1,764		
St. Johns				
Santa Rosa				
Sumter				
Suwannee				
Taylor				
*Volusia				
Wakulla				
Walton				
Washington				
Total	5,659	59,355	1,800	$2,396 00

*Not reported.

NO. 3. FRUITS—Continued.

COUNTIES.	LIMES.		
	Trees.	Crates.	Value.
Alachua			
Baker			
Bradford			
Brevard			
Calhoun			
Citrus	25		
Clay			
Columbia			
Dade			
DeSoto	733	140	622 00
Duval			
Escambia			
Franklin			
Gadsden			
Hamilton			
Hernando			
Hillsborough			
Holmes			
Jackson			
Jefferson			
Lafayette			
Lake	962	5	5 00
Lee	478	282	343 00
Leon			
Levy			
Liberty			
Madison			
Manatee			
Marion			
*Monroe			
*Nassau			
Orange	75		
Osceola	27		
Pasco			
Polk			
Putnam			
St. Johns			
Santa Rosa			
Sumter			
Suwannee			
Taylor			
*Volusia			
Wakulla			
Walton			
Washington			
Total	2,300	427	970 00

*Not reported.

NO. 3. FRUITS —Continued.

COUNTIES.	GRAPE FRUIT.		
	Trees.	Barrels.	Value.
Alachua			
Baker			
Bradford			
Brevard	8,560	489	$1,048 00
Calhoun			
Citrus	110		
Clay			
Columbia			
Dade			
DeSoto	19.507	2,616	13.832 00
Duval			
Escambia			
Franklin			
Gadsden			
Hamilton			
Hernando	1,010	10	25 00
Hillsborough	2,925	200	1,597 00
Holmes			
Jackson			
Jefferson			
Lafayette			
Lake	18,345	10	43 00
Lee	5,250	573	3,893 00
Leon			
Levy			
Liberty			
Madison			
*Manatee			
Marion	21,699		
*Monroe			
*Nassau			
Orange	1,349	8	24 00
Osceola	1,625		
Pasco			
Polk	1.140	305	1,220 00
Putnam	16,122		
St. Johns			
Santa Rosa			
Sumter			
Suwannee			
Taylor			
*Volusia			
Wakulla			
Walton			
Washington			
Total	99,642	4,211	$21,682 00

*Not reported.

NO. 3. FRUITS—Continued.

COUNTIES.	PINEAPPLES.	
	Crates.	Value.
Alachua		
Baker		
Bradford		
Brevard	65,835	$ 60,810 00
Calhoun		
Citrus	110	150 00
Clay		
Columbia		
Dade	29,600	56,800 00
DeSoto	9,124	9,587 00
Duval		
Escambia		
Franklin		
Gadsden		
Hamilton		
Hernando		
Hillsborough	25	100 00
Holmes		
Jackson		
Jefferson		
Lafayette		
Lake	300	337 00
Lee	12,236	30,629 00
Leon		
Levy		
Liberty		
Madison		
*Manatee		
Marion	80	250 00
*Monroe		
*Nassau		
Orange	400	1 599 00
Osceola	200	400 00
Pasco		
Polk		
Putnam		
St. Johns		
Santa Rosa		
Sumter		
Suwannee		
Taylor		
*Volusia		
Wakulla		
Walton		
Washington		
Total	117,910	$160,662 00

*Not reported.

NO. 3. FRUITS—Continued.

COUNTIES.	BANANAS.	
	Bunches.	Value.
Alachua		
Baker		
Bradford		
Brevard	200	$220 00
Calhoun		
Citrus		
Clay		
Columbia		
Dade		
DeSoto	3,574	2,772 00
Duval		
Escambia		
Franklin		
Gadsden		
Hamilton		
Hernando		
Hillsborough		
Holmes		
Jackson		
Jefferson		
Lafayette		
Lake	4,460	332 00
Lee	310	155 00
Leon		
Levy		
Liberty		
Madison		
*Manatee		
Marion		
*Monroe		
*Nassau		
Orange	140	49 00
Osceola	115	115 00
Pasco		
Polk		
Putnam		
St. Johns		
Santa Rosa		
Sumter		
Suwannee		
Taylor		
*Volusia		
Wakulla		
Walton		
Washington		
Total	8,799	$3,643 00

*Not reported.

NO. 3. FRUITS—Continued.

COUNTIES.	AVOC. DO PEARS.	
	Barrels.	Value
Alachua		
Baker		
Bradford		
Brevard		
Calhoun		
Citrus		
Clay		
Columbia		
Dade	50	$2,000 00
DeSoto		
Duval		
Escambia		
Franklin		
Gadsden		
Hamilton		
Hernando		
Hillsborough		
Holmes		
Jackson		
Jefferson		
Lafayette		
Lake		
Lee	141	460 00
Leon		
Levy		
Liberty		
Madison		
*Manatee		
Marion		
*Monroe		
*Nassau		
Orange		
Osceola		
Pasco		
Polk		
Putnam		
St. Johns		
Santa Rosa		
Sumter		
Suwannee		
Taylor		
*Volusia		
Wakulla		
Walton		
Washington		
Total	191	$2,460 00

*Not reported.

NO. 3. FRUITS—Continued.

COUNTIES.	GUAVAS.	
	Crates.	Value.
Alachua		
Baker		
Bradford		
Brevard	5 395	$2,960 00
Calhoun		
Citrus	30	40
Clay		
Columbia		
Dade		
DeSoto	6,656	6,656 00
Duval	10	16 00
Escambia		
Franklin		
Gadsden		
Hamilton		
Hernando		
Hillsborough	460	270 00
Holmes		
Jackson		
Jefferson		
Lafayette		
Lake	49	9 00
Lee	1,085	583 00
Leon		
Levy		
Liberty		
Madison		
*Manatee		
Marion		
*Monroe		
*Nassau		
Orange	29	26 00
Osceola	440	440 00
Pasco		
Polk		
Putnam		
St. Johns		
Santa Rosa		
Sumter		
Suwannee		
Taylor		
*Volusia		
Wakulla		
Walton		
Washington		
Total	14.154	$11.000 00

*Not reported.

NO. 3. FRUITS—Continued.

COUNTIES.	COCOANUTS.		
	Trees.	Nuts.	Value.
Alachua			
Baker			
Bradford			
Brevard	1,175	36,350	$1,840 00
Calhoun			
Citrus			
Clay			
Columbia			
Dade	1,000		
DeSoto	26		
Duval			
Escambia			
Franklin			
Gadsden			
Hamilton			
Hernando			
Hillsborough			
Holmes			
Jackson			
Jefferson			
Lafayette			
Lake			
Lee	2,906	6,500	230 00
Leon			
Levy			
Liberty			
Madison			
*Manatee			
Marion			
*Monroe			
*Nassau			
Orange			
Osceola			
Pasco			
Polk			
Putnam			
St. Johns			
Santa Rosa			
Sumter			
Suwannee			
Taylor			
*Volusia			
Wakulla			
Walton			
Washington			
Total	5,107	42,850	$2,700 00

*Not reported.

NO. 3. FRUITS—Continued.

COUNTIES.	PECANS.		
	Trees.	Bushels.	Value.
Alachua			
Baker	100	53	$265 00
Bradford			
Brevard			
Calhoun			
Citrus	30		
Clay	3,489	10	37 00
Columbia	82	38	89 00
Dade			
DeSoto	123	10	23 00
Duval			
Escambia			
Franklin			
Gadsden			
Hamilton			
Hernando			
Hillsborough	50	10	25 00
Holmes			
Jackson			
Jefferson	7,150	550	1,650 00
Lafayette	33	10	30 00
Lake	15	3	5 00
Lee	107		
Leon	1,980	510	1,950 00
Levy			
Liberty			
Madison			
*Manatee			
Marion			
*Monroe			
*Nassau			
Orange			
Osceola			
Pasco			
Polk			
Putnam			
St. Johns			
Santa Rosa	500	100	457 00
Sumter			
Suwannee			
Taylor			
*Volusia			
Wakulla	20	20	20 00
Walton	51	4	8 00
Washington			
Total	13,689	1,318	$4,559 00

*Not Reported.

NO. 3. FRUITS—Continued.

COUNTIES.	STRAWBERRIES.		
	Acres.	Quarts.	Value.
Alachua	102	80,840	$ 7,575 00
Baker			
Bradford	167	152,520	11,250 00
Brevard			
Calhoun			
Citrus	4	8,600	1,620 00
Clay	17	9,400	2,642 00
Columbia			
Dade			
DeSoto	8	10,331	1.211 00
Duval	36	25,626	2 973 00
Escambia	2	2,700	270 00
Franklin			
Gadsden			
Hamilton			
Hernando	11	6,550	1,100 00
Hillsborough	151	189,125	19 269 00
Holmes			
Jackson			
Jefferson	4	3,300	500 00
Lafayette			
Lake	5	1,125	188 00
Lee	1	400	95 00
Leon	4	12,990	2,090 00
Levy			
Liberty			
Madison			
*Manatee			
Marion	4	3,000	460 00
*Monroe			
*Nassau			
Orange	5	3,480	565 00
Osceola	1	500	200 00
Pasco	219	614,010	52,400 00
Polk	78	85,830	9.495 00
Putnam	232	71,745	7,058 00
St. Johns	25	15,000	1,600 00
Santa Rosa			
Sumter			
Suwannee			
Taylor			
*Volusia			
Wakulla			
Walton			
Washington			
Total	1.074	1.297 022	$132.561 00

*Not reported.

NO. 3. FRUITS—Continued.

COUNTIES.	PEARS.		
	Trees.	Barrels.	Value.
Alachua	3,560	2,067	$1,795 00
Baker	6,680	6,123	6,125 00
Bradford	88	125	105 00
Brevard			
Calhoun			
Citrus	934	1,708	2,348 00
Clay	14,158	865	3,398 00
Columbia	8,118	3,808	3,744 00
Dade			
DeSoto	505	15	53 00
Duval	2,250	815	725 00
Escambia			
Franklin	1,554		
Gadsden			
Hamilton	128	156	340 00
Hernando	50	46	111 00
Hillsborough			
Holmes	5,000	200	300 00
Jackson	4,109	4,109	6,159 00
Jefferson	8,243	5,194	4,960 00
Lafayette	160	80	80 00
Lake	3,806	1,727	1,726 00
Lee			
Leon	10,000	6,500	6,500 00
Levy			
Liberty			
Madison			
*Manatee			
Marion	7,884	2,069	1,760 00
*Monroe			
*Nassau			
Orange	204	62	109 00
Osceola	51	2	24 00
Pasco	1,250	1,875	3,685 00
Polk			
Putnam	2,762	11,580	11,418 00
St. Johns	6,945	6,685	6,765 00
Santa Rosa	5,000	500	1,075 00
Sumter			
Suwannee			
Taylor			
*Volusia			
Wakulla	141	254	652 00
Walton	1,743	1,609	1,286 00
Washington			
Total	95,323	58,194	$65,243 00

*Not Reported.

NO. 8. FRUITS —Continued.

COUNTIES.	PEACHES.		
	Trees.	Bushels.	Value.
Alachua	4,345	2,630	$2,230 00
Baker	19,142	15,045	11,041 00
Bradford	31	62	74 00
Brevard			
Calhoun			
Citrus	8,278	4,120	3,639 00
Clay	6,518	199	474 00
Columbia	9,139	3,441	2,281 00
Dade			
DeSoto	2,120	346	557 00
Duval	1,948	1,285	1,200 00
Escambia			
Franklin	2,679		
Gadsden			
Hamilton			
Hernando	1,156	243	354 00
Hillsborough	929	618	765 00
Holmes	800	1,400	700 00
Jackson	3,651		
Jefferson	496	206	215 00
Lafayette	1,805	742	743 00
Lake	8,118	671	815 00
Lee			
Leon	5,400	2,200	2,200 00
Levy	5,795		
Liberty			
Madison			
*Manatee			
Marion	6,625	2,807	1,793 00
*Monroe			
*Nassau			
Orange	6,253	1,274	1,506 00
Osceola	5,520	2,260	4 520 00
Pasco	1,210	1,940	3 485 00
Polk	510	194	426 00
Putnam	7,889	32,265	25 471 00
St. Johns	60	120	120 00
Santa Rosa	3,500	3,447	2,338 00
Sumter			
Suwannee			
Taylor			
*Volusia			
Wakulla	1,655	2,496	2,496 00
Walton	2,473	2 555	1,607 00
Washington			
Total	118 045	81 716	$71,149 00

*Not reported.

NO. 4. LIVE STOCK.

COUNTIES.	HORSES.		MULES.	
	No.	Value.	No.	Value.
Alachua	2,438	$139,165	1,077	$70,665
Baker	474	26,542	280	18,810
Bradford	1,126	57,625	139	7,210
Brevard	294	15,480	4	240
Calhoun	429	18,970	32	2,135
Citrus	614	34,625	162	12,350
Clay	540	18,200	56	2,390
Columbia	1,292	71,170	751	44,610
Dade	21	1,300	3	180
DeSoto	1,392	42,694	51	1,945
Duval	575	37,513	154	14,760
Escambia	1,253	82,705	246	20,565
Franklin	52	4,715	.....	.....
Gadsden	1,546	61,750	872	34,880
Hamilton	1,036	65,001	671	47,315
Hernando	492	21,900	134	9,730
Hillsborough	2,369	114,017	283	19,000
Holmes	400	20,000	391	22,460
Jackson	2,873	143,650	909	45,450
Jefferson	1,028	45,381	1,328	77,623
Lafayette	480	20,020	142	8,110
Lake	903	41,870	193	11,640
Lee	296	13,845	7	415
Leon	1,460	69,880	780	37,230
Levy	1,330	51,915	.....	.....
Liberty	186	11,179	48	2,675
Madison	1,351	64,353	815	45,588
*Manatee	.....	.....	.....	.....
Marion	2,299	73,545	245	11,390
*Monroe	.....	.....	.....	.....
*Nassau	.....	.....	.....	.....
Orange	1,759	93,530	353	21,930
Osceola	706	23,090	67	3,280
Pasco	893	29,220	231	9,640
Polk	1,629	81,450	182	9,600
Putnam	1,910	115,516	500	32,025
St. Johns	754	5,490	65	2,250
Santa Rosa	824	31,277	18	810
Sumter	1,300	49,590	64	3,055
Suwannee	1,810	45,704	445	18,800
Taylor	395	16,551	82	3,801
*Volusia	.....	.....	.....	.....
Wakulla	510	23,539	210	13,025
Walton	655	27,865	86	4,045
Washington	817	23,925	110	4,680
Total	42,540	$1,931,757	12,196	$599,228

*Not reported.

NO. 4. LIVE STOCK—Continued.

COUNTIES.	ASSES.		STOCK CATTLE.	
	No.	Value.	No.	Value.
Alachua	4	$310	13,937	$99 278
Baker			5.536	27.680
Bradford			2,616	12,990
Brevard			3,857	38 750
Calhoun			5,757	29,920
Citrus			8,149	46,565
Clay			7,453	44.730
Columbia			9.595	47.695
Dade			600	6,000
DeSoto	1	50	42,748	171 870
Duval			7,776	47.145
Escambia			7,948	52,210
Franklin			1,610	8,975
Gadsden			5,072	45 850
Hamilton	2	125	6,871	39,435
Hernando			4.722	28.325
Hillsborough	3	325	35,097	163.150
Holmes	1	75	5,082	20 410
Jackson			11,999	59.995
Jefferson			4,166	21,576
Lafayette			2,460	15,300
Lake	2	40	6,615	33 664
Lee			22.227	90.920
Leon	3	1,000	5,710	32,110
Levy			15,615	78,075
Liberty	1	25	4,039	21,080
Madison			6,531	32,525
*Manatee				
Marion	4	110	14,370	72,753
*Monroe				
*Nassau				
Orange	1	10	16,385	81,160
Osceola	5	50	32,231	161,335
Pasco	2	200	7,760	38,250
Polk			37,793	188,965
Putnam			3,465	26,575
St. Johns			7,221	17,495
Santa Rosa			10,398	43,515
Sumter			10,894	56,060
Suwannee	1	50	9,590	47,950
Taylor			9,167	22,424
*Volusia				
Wakulla	1	20	7,884	29.908
Walton			6,645	33,225
Washington	3	40	8.814	43,470
Total	34	$2 430	431,005	$2.167.108

*Not reported.

NO. 4. LIVE STOCK—Continued.

COUNTIES.	SHEEP.		GOATS.	
	No.	Value.	No.	Value.
Alachua	1,240	$2,400	275	$290
Baker	618	1,241	607	598
Bradford	650	750	805	415
Brevard				
Calhoun	3,895	4,781	732	358
Citrus	2,120	4,130	250	360
Clay	515	515	391	391
Columbia	549	1,179	523	268
Dade				
DeSoto	1,915	3,684	16	34
Duval	580	1,033	237	310
Escambia	8,550	17,100	970	485
Franklin	461	705		
Gadsden	729	729	1,952	985
Hamilton	403	786	386	492
Hernando	670	930	790	790
Hillsborough	4,115	7,775	635	850
Holmes	5,082	6,352	30,094	1,547
Jackson	1,791	2,454	366	183
Jefferson	217	301	701	318
Lafayette			150	75
Lake	10	25	183	193
Lee				
Leon	500	1,000	400	400
Levy	565	565		
Liberty	634	1,333	215	135
Madison	75	75	32	16
*Manatee				
Marion	2,530	6,160	2,381	1,055
*Monroe				
*Nassau				
Orange	63	121	6	13
Osceola	1,935	3,870		
Pasco	520	1,220	660	1,500
Polk	3,125	6,779	46	61
Putnam				
St. Johns	40	40		
Santa Rosa	11,075	16,882	220	125
Sumter	1,274	1,345	470	518
Suwannee			301	118
Taylor	219	110	207	102
*Volusia				
Wakulla	368	254	546	257
Walton	17,456	25,969		
Washington	7,728	10,564	889	454
Total	81,237	$132,047	19,126	$14 516

*Not reported.

NO. 4. LIVE STOCK—Continued.

COUNTIES.	HOGS.	
	No.	Value.
Alachua	6,290	$ 10,452
Baker	2,798	2,872
Bradford	3,620	3,620
Brevard	1,960	5,765
Calhoun	5,896	5,792
Citrus	10,129	10,419
Clay	4,065	4,065
Columbia	13,510	32,786
Dade	.....	.....
DeSoto	8,106	8,130
Duval	4,585	10,687
Escambia	5,597	5,632
Franklin	565	858
Gadsden	7,473	7,473
Hamilton	16,302	32,673
Hernando	5,067	9,560
Hillsborough	14,045	18,793
Holmes	7,669	7,669
Jackson	22,281	22,281
Jefferson	23,477	46,630
Lafayette	12,550	12,550
Lake	6,020	10,440
Lee	2,103	2,707
Leon	19,980	53,110
Levy	5,555	5,555
Liberty	3,997	4,608
Madison	1,544	15,714
*Manatee	.....	.....
Marion	8,466	8,116
*Monroe	.....	.....
*Nassau	.....	.....
Orange	5,384	7,341
Osceola	3,279	3,279
Pasco	7,770	8,130
Polk	11,970	11,970
Putnam	11,342	18,588
St. Johns	3,220	4,515
Santa Rosa	3,209	2,801
Sumter	4,550	4,763
Suwannee	7,178	7,178
Taylor	5,786	5,002
*Volusia	.....	.....
Wakulla	11,041	11,113
Walton	5,672	5,672
Washington	6,075	6,134
Total	310,126	$316,053

*Not reported.

NO. 5. POULTRY.

COUNTIES.	CHICKENS.		DUCKS.	
	No.	Value.	No.	Value.
Alachua	9,411	$ 1,824	127	$ 53
Baker	14,696	4.351	856	354
Bradford				
Brevard	11.955	5,965		
Calhoun	6.890	1,825		
Citrus	12,579	3,556	215	152
Clay	11,570	3,427	146	73
Columbia	53.507	13,430	94	46
Dade				
DeSoto	16,852	4,193	388	157
Duval	21,795	7.542		
Escambia	57.700	8,655		
Franklin	34.362	6,510	206	103
Gadsden	21,686	3,713		
Hamilton	34.306	8 396	67	34
Hernando	6.684	1,759	20	10
Hillsborough	63.392	19,217	6	6
Holmes	17,797	4,439	2,000	500
Jackson	41,460	8.292	22	11
Jefferson	44.122	8,991	164	46
Lafayette	3,250	1,114	250	110
Lake	25,289	6,593	253	84
Lee	5,439	1.877	52	24
Leon	82,610	16.980	1,290	390
Levy	10.200	2.542		
Liberty	5,178	1,084	159	49
Madison	5,378	1,237		
*Manatee				
Marion	29,698	7,441	322	171
*Monroe				
*Nassau				
Orange	42,999	16,299	118	60
Osceola	13.875	3,498	195	175
Pasco	27,545	7,275	1,150	590
Polk	38.888	8,803	390	259
Putnam	69,478	43.236	23	8
St. Johns	3,260	1,008		
Santa Rosa	2 115	446		
Sumter	5.479	1,660		
Suwannee				
Taylor	9,919	2.003		
*Volusia				
Wakulla	32.771	8,138	22	6
Walton	11,270	2.680	67	17
Washington	10,365	2,048		
Total	922.330	$ 242 037	8 604	$ 3,468

*Not reported.

NO. 5. POULTRY—Continued.

COUNTIES.	GEESE.		TURKEYS.	
	No.	Value.	No.	Value.
Alachua	142	72	485	370
Baker	3,478	2,387	2,021	1,402
Bradford				
Brevard			1,735	2,645
Calhoun	288	214		
Citrus	120	160	696	695
Clay	340	340	315	290
Columbia	445	219	430	295
Dade				
DeSoto	577	435	847	862
Duval				
Escambia	106	53	191	191
Franklin	227	227	255	255
Gadsden				
Hamilton	3,636	1,955	278	206
Hernando	30	25	67	67
Hillsborough	12	6	10	10
Holmes	3,908	1,954	576	432
Jackson	1 654	827	1,346	673
Jefferson	532	251	982	648
Lafayette	602	301	210	210
Lake	45	42	801	539
Lee	8	4	47	46
Leon	780	390	6,090	4,507
Levy				
Liberty	30	16	62	30
Madison	110	54		
*Manatee				
Marion	2,041	1,270	2 721	3,603
*Monroe				
*Nassau				
Orange	43	38	372	460
Osceola	390	390	667	667
Pasco	1 395	1,395	1,870	1,870
Polk	330	263	882	882
Putnam			383	261
St. Johns				
Santa Rosa	280	151	149	101
Sumter	15	8	90	62
Suwannee				
Taylor	232	121	205	162
*Volusia				
Wakulla	101	90	65	81
Walton	186	93	135	129
Washington	31	16	80	45
Total	22.084	$14.062	22.973	$22.691

*Not reported.

NO. 5. POULTRY—Continued.

COUNTIES.	EGGS SOLD AND USED	
	Dozen.	Value.
Alachua	8,181	$1 374
Baker	56,607	6,974
Bradford		
Brevard	116,690	16,938
Calhoun	8,800	880
Citrus	49,750	14,110
Clay	25,975	3,913
Columbia	60,719	6,033
Dade		
DeSoto	123,974	18,835
Duval	57,931	10,705
Escambia	104,800	15,720
Franklin		
Gadsden	63,115	6,391
Hamilton	55,959	6,768
Hernando	18,500	3,620
Hillsborough	83,898	27,326
Holmes	25,000	2,500
Jackson	82,920	16,584
Jefferson	105,810	10,587
Lafayette	4,080	705
Lake	41,628	6,348
Lee	13,135	3,263
Leon	268,890	28,990
Levy		
Liberty	34,386	1,424
Madison	26,800	2,590
*Manatee		
Marion	146,081	14,617
*Monroe		
*Nassau		
Orange	87,946	17,724
Osceola	13,430	2,035
Pasco	269,200	29,180
Polk	68,937	9,829
Putnam	155,810	24,998
St. Johns		
Santa Rosa		
Sumter	1,950	319
Suwannee		
Taylor	14,550	763
*Volusia		
Wakulla	81,866	8,339
Walton		
Washington	16,292	1,683
Total	2,233,631	$320.235

*Not reported.

NO. 6. DAIRY PRODUCTS.

COUNTIES.	MILCH COWS.		MILK SOLD AND USED.	
	No.	Value.	Gallons.	Value.
Alachua	47	$1,260	8,500	$2,425
Baker	1,394	13,940	69,220	27,708
Bradford				
Brevard	179	4,975	20,718	6,145
Calhoun				
Citrus	1,278	20,000	77,200	15,910
Clay	321	3,260	12,950	5,180
Columbia	1,238	12,861	66,005	26,129
Dade	17	360		
DeSoto	895	13,054	93,910	18,893
Duval	2,314	22,522	122,558	24,929
Escambia	205	4,560	43,300	10,825
Franklin	275	2,415		
Gadsden	408	4,080	163,900	40,560
Hamilton	2,525	15,727	71,045	27,237
Hernando	413	5,050	44,720	8,940
Hillsborough	744	25,025	102,056	27,736
Holmes	1,018	10,180	85,000	17,000
Jackson	1,490	14,900	149,000	49,600
Jefferson	1,724	15,739	129,119	26,736
Lafayette	506	4,500	24,150	8,690
Lake	596	14,987	63,698	19,857
Lee	545	8,784	27,544	8,875
Leon	3,495	57,340	410,820	65,980
Levy	3,569	35,690		
Liberty	12	345	3,310	912
Madison				
*Manatee				
Marion	4	200	5,000	2,000
*Monroe				
*Nassau				
Orange	815	21,435	282,750	82,455
Osceola	544	10,105	35,695	5,009
Pasco	256	8,240	59,600	17,850
Polk	423	9,175	145,549	59,076
Putnam	1,217	27,581	41,116	12,300
St. Johns				
Santa Rosa				
Sumter				
Suwannee				
Taylor	1,957	4,655	21,175	5,602
*Volusia				
Wakulla	1,605	6,712	28,465	8,212
Walton				
Washington	1,293	6,893	30,665	8,951
Total	33,223	$410,550	2,439,568	$641,622

*Not reported.

NO. 6. DAIRY PRODUCTS—Continued.

COUNTIES.	BUTTER SOLD AND USED.		CHEESE SOLD AND USED.	
	Pounds.	Value.	Pounds.	Value.
Alachua	1,450	$450		
Baker	9,900	2 969		
Bradford				
Brevard				
Calhoun				
Citrus	45,080	11,390		
Clay	3,475	695		
Columbia	13,265	3,272		
Dade				
DeSoto	23,473	5,870		
Duval	2,428	493		
Escambia	700	156		
Franklin				
Gadsden	80.200	16,960		
Hamilton	33,210	8,264		
Hernando	8.910	2,229	100	$10
Hillsborough	6,500	1,970		
Holmes	1,800	450		
Jackson	14,900	2.980		
Jefferson	30,066	6,155	45	8
Lafayette	340	80		
Lake	28,050	7,220		
Lee	2.615	680		
Leon	165,810	38,990	1,800	180
Levy				
Liberty	1,980	396		
Madison				
*Manatee				
Marion				
*Monroe				
*Nassau				
Orange	3,991	1,194		
Osceola	4,045	1,089		
Pasco	19,050	5,665	7,300	730
Polk	24.356	6,251		
Putnam	10,948	3,528		
St. Johns				
Santa Rosa				
Sumter				
Suwannee				
Taylor	3,140	695		
*Volusia				
Wakulla	10.030	2,465		
Walton				
Washington	18,867	3,793		
Total	567.608	$126.349	9.245	$928

*Not reported.

NO. 7. MISCELLANEOUS PRODUCTS.

COUNTIES.	WOOL.		
	Fleeces.	Pounds.	Value.
Alachua	830	1,740	$250 00
Baker	520	1,020	210 00
Bradford			
Brevard			
Calhoun	3,606	10,813	2,158 00
Citrus	1,700	2,560	512 00
Clay			
Columbia	611	1,500	238 00
Dade			
DeSoto	1,665	4,155	421 00
Duval			
Escambia	8,550	25,650	4,275 00
Franklin			
Gadsden	929	2,065	413 00
Hamilton	298	410	66 00
Hernando	620	1,860	305 00
Hillsborough	3,507	10 575	1,056 00
Holmes	5,082	12,705	1,398 00
Jackson	1,665	4,995	667 00
Jefferson	244	446	45 00
Lafayette			
Lake			
Lee			
Leon	300	900	180 00
Levy			
Liberty	530	1,704	223 00
Madison			
*Manatee			
Marion	2,437	6,925	1,184 00
*Monroe			
*Nassau			
Orange			
Osceola	1,385	4,155	831 00
Pasco	170	510	110 00
Polk	2,343	6,521	742 00
Putnam			
St. Johns			
Santa Rosa	13,444	39,676	8,096 00
Sumter			
Suwannee			
Taylor			
*Volusia			
Wakulla	43	129	27 00
Walton	16,946	50,829	9.973 00
Washington	6,977	20,631	2,292 00
Total	74,402	220.174	$36,073 00

*Not reported.

NO. 7. MISCELLANEOUS PRODUCTS—Continued.

COUNTIES.	HONEY.		
	Stands of Bees.	Pounds. Honey.	Value.
Alachu			
Baker	131	2,100	$180 00
Bradford			
Brevard	1,126	116,500	16,310 00
Calhoun	2,896	169,000	18,170 00
Citrus	24	810	100 00
Clay			
Columbia	120	1,360	117 00
Dade			
DeSoto	972	29,410	2,941 00
Duval	78	620	77 00
Escambia	795	7,950	795 00
Franklin			
Gadsden			
Hamilton	111	1,025	102 00
Hernando			
Hillsborough	94	2,025	222 00
Holmes	300	6,000	600 00
Jackson			
Jefferson	131	1,415	141 00
Lafayette			
Lake	287	4,685	416 00
Lee	56	1,695	205 00
Leon	618	9,100	610 00
Levy			
Liberty	1,984	43,803	2,643 00
Madison			
*Manatee			
Marion	248	4,950	762 00
*Monroe			
*Nassau			
Orange	228	3,810	391 00
Osceola			
Pasco	20	100	15 00
Polk	108	1,738	193 00
Putnam	1,187	127,418	2,220 00
St. Johns	595	5,950	565 00
Santa Rosa	2	100	5 00
Sumter			
Suwannee			
Taylor			
*Volusia			
Wakulla	494	1,472	696 00
Walton			
Washington			
Total	12,605	543,036	$49,581 00

*Not reported.

NO. 7. MISCELLANEOUS PRODUCTS—Continued.

COUNTIES.	GRAPE VINES.			
	GRAPES.		WINE.	
	Pounds.	Value.	Gallons.	Value.
Alachua				
Baker	40,500	$ 2,524	1,420	$1,420
Bradford				
Brevard				
Calhoun				
Citrus	30,000	610	680	150
Clay	4,300	86	1,298	1,325
Columbia	15,675	892	875	835
Dade				
DeSoto	28,860	1,204	230	86
Duval	24,758	1,371	783	546
Escambia				
Franklin				
Gadsden				
Hamilton	2,207	386	560	560
Hernando				
Hillsborough	500	50		
Holmes	10,000	500	150	225
Jackson				
Jefferson	1,340	94	506	233
Lafayette	50	20		
Lake	5,830	260	190	155
Lee				
Leon	214,000	15,840	8,690	9,590
Levy				
Liberty				
Madison				
*Manatee				
Marion	4,000	200	100	100
*Monroe				
*Nassau				
Orange	11,112	1,137	400	400
Osceola				
Pasco	14,800	1,470	1,590	1,500
Polk	17,510	1,328		
Putnam	34,150	11,020	20,825	15,684
St. Johns	13,500	1,350		
Santa Rosa				
Sumter				
Suwannee				
Taylor				
*Volusia				
Wakulla	11,400	398	460	460
Walton				
Washington	200	20	1,020	1,015
Total	487,492	$ 40,760	39,777	$34,278

*Not reported.

NO. 7. MISCELLANEOUS PRODUCTS—Continued.

COUNTIES.	FIGS.		MOSS.	
	Bushels	Value.	Tons.	Value.
Alachua				
Baker				
Bradford				
Brevard				
Calhoun				
Citrus	175	$225		
Clay				
Columbia				
Dade				
Desoto	12	33		
Duval				
Escambia				
Franklin				
Gadsden				
Hamilton				
Hernando				
Hillsborough				
Holmes	600	600		
Jackson				
Jefferson	3	8	10	$100 00
Lafayette				
Lake	21	40	5	200 00
Lee				
Leon	650	500	800	8,000 00
Levy				
Liberty				
Madison				
*Manatee				
Marion				
*Monroe				
*Nassau				
Orange	4	4		
Osceola				
Pasco				
Polk				
Putnam			8	111 00
St. Johns				
Santa Rosa				
Sumter				
Suwannee				
Taylor				
*Volusia				
Wakulla				
Walton				
Washington	30	30		
Total	1,495	$1,440	823	$8,411 00

*Not reported.

NO. 8. TOTAL VALUE OF FARM PRODUCTS BY COUNTIES.

COUNTIES.	Annual Products.	Live Stock and Poultry.	Totals.
Alachua	$360,523	$327,514	$688,037
Baker	288,975	100,187	389,162
Bradford	200,982	85,610	286,592
Brevard	308,096	73,820	381,916
Calhoun	104,646	63,995	168,641
Citrus	223,257	133,012	356,269
Clay	50,522	77,681	128,203
Columbia	415,117	224,533	639,650
Dade	365,233	7,840	373,073
DeSoto	452,689	247,108	699,797
Duval	127,835	141,512	269,347
Escambia	123,195	192,156	315,351
Franklin	9,206	24,764	33,970
Gadsden	199,605	159,460	959,065
Hamilton	337,558	212,145	549,703
Hernando	85,664	78,146	163,810
Hillsborough	337,783	368,164	705,947
Holmes	124,233	95,994	220,227
Jackson	855,168	299,216	1,154,384
Jefferson	556,196	217,504	773,700
Lafayette	263,864	62,240	326,104
Lake	148,836	120,117	268,953
Lee	163,766	118,622	282,388
Leon	1,081,863	274,337	1,356,200
Levy	97,204	171,800	269,004
Liberty	49,346	42,598	91,947
Madison	471,851	159,532	631,383
*Manatee	.....	.....	.....
Marion	625,088	185,814	810,902
*Monroe	.....	.....	.....
*Nassau	.....	.....	.....
Orange	235,911	242,997	478,908
Osceola	110,894	209,739	320,633
Pasco	479,750	107,530	587,280
Polk	322,895	318,207	641,102
Putnam	436,188	262,790	698,978
St. Johns	163,887	30,798	194,685
Santa Rosa	97,020	95,410	192,430
Sumter	40,789	117,061	157,850
Suwannee	397,557	119,800	517,357
Taylor	74,028	55,031	129,059
*Volusia	.....	.....	.....
Wakulla	122,191	93,257	215,434
Walton	97,487	94,695	192,182
Washington	178,168	98,269	276,437
Total	$11,795,065	$6,110,995	$17,906,060

*Not reported.

TABLE NO. 9--TOTAL ACREAGE.

Field crops	860,684
Vegetable and garden products	21,378
Total acreage in cultivation	882.062

TABLE NO. 10--TOTAL VALUE OF FARM PRODUCTS.

Table No. 1—Field crops	$7,958.500
Table No. 2—Vegetable and garden products	1,778.318
Table No. 3—Fruit crops	953.616
Table No. 4—Live stock	5,673.691
Table No. 5—Poultry	602,493
Table No. 6—Dairy products	768 899
Table No. 7—Miscellaneous products	170.543
Total	$17.906,060

TABLE NO. 11.—TABLES OF CROP AVERAGES FOR PERIODS OF FIVE AND TEN YEARS, 1898.

TABLE 1.	Year.	Upland Cotton.	Sea-Island Cotton.	Corn.	Oats.	Sugar Cane.	Sweet Potatoes	Field Peas.	Rice.	Rye	Peanuts.	Hay.	Tobacco.	Cabbage.	Irish Potatoes.	Tomatoes.	Cucumbers.	English Peas.	Beans.	Egg Plants.	Watermelons.	Strawberries.
Average	1889	95	89	100	82	100	97	95	100	85	98	80	84	90	89	99	81	75	86	76	95	92
Average	1890	80	84	97	60	100	100	96	98	83	100	100	89	85	79	82	79	78	85	78	75	82
Average	1891	87	89	93	84	100	100	98	100	81	98	100	100	100	100	93	92	94	100	92	100	93
Average	1892	58	42	100	66	99	100	99	79	65	100	100	80	80	63	82	87	75	79	82	87	81
Average	1893	76	78	98	98	100	100	97	98	86	100	100	98	100	100	100	97	95	95	90	99	98
Gen'l Av'ge 5 years.		79	76	98	78	100	99	97	95	80	99	96	90	91	86	91	87	87	89	84	91	89
TABLE 2.																						
Average	1894	84	78	97	89	100	100	97	100	84	100	100	81	96	85	92	85	90	90	88	99	82
Average	1895	76	80	100	82	75	100	100	100	70	100	100	98	80	74	86	87	82	87	100	87	85
Average	1896	70	77	89	90	85	90	86	93	72	95	95	100	87	73	94	79	64	80	90	87	91
Average	1897	71	70	83	70	93	92	91	92	81	92	93	97	85	75	87	74	81	83	76	92	81
Average	1898	58	60	85	65	92	93	86	91	68	96	98	82	75	65	68	64	65	70	75	84	76
Gen'l Av'ge 5 years.		72	73	91	79	89	95	92	95	75	97	97	92	85	74	85	78	76	82	86	90	83
TABLE 3.	Recapitulation, Showing Average Annual Crop Production for 10 Years.																					
General Average...	1889 to 1893	79	76	98	78	100	99	97	95	80	99	96	90	91	86	91	87	87	89	84	91	89
General Average....	1894 to 1898	72	73	91	79	89	95	92	95	75	97	97	92	85	74	85	78	76	82	86	90	83
Gen'l av'age 10 years		75	75	95	79	95	97	95	95	78	98	97	91	88	80	88	83	82	86	85	90	86

TABLE No. 12. (Condensed.)

PRINCIPAL ARTICLES OF FLORIDA PRODUCTION EXPORTED FROM FLORIDA DURING THE YEAR 1897.

ARTICLES	PACKAGES.	QUANTITIES.	EXPORT VALUATIONS.
Cotton (Upland)	Bales	39,533	$ 1,172,335
Cotton (Sea Island)	Bales	22,143	891,143
Oats	Bushels	185,100	91,439
Sweet Potatoes	Bushels	15,218	7,410
Syrup	Barrels	16,427	328,540
Sugar	Pounds	127,210	4,950
Rice	Bushels	59,620	59,620
Field Peas	Bushels	48,275	48,275
Peanuts	Bushels	221 321	212,197
Irish Potatoes	Bushels	186,935	233,903
Cabbage	Barrels	162,829	173,637
Tomatoes	Boxes	540,630	650,894
Squashes	Barrels	15,743	19,640
Egg Plant	Barrels	24,936	69,532
Cucumbers	Crates	68,835	65,340
Watermelons	Car Loads	2,190	109,087
Cantaloupe	Barrels	25,027	27,422
English Peas	Crates	41,899	35,298
Beets	Crates	29,628	29,435
Beans	Crates	360,597	264,130
Oranges	Boxes	316,579	456,672
Lemons	Boxes	1,800	2,396
Limes	Boxes	427	970
Grape Fruit	Barrels	4,211	21,682
Pineapples	Crates	117,910	160,662
Bananas	Bunches	8,799	3,643
Avocado Pears	Barrels	191	2,460
Guavas	Crates	14,154	11,000
Cocoanuts	Crates	42,850	2,070
Pecans	Bushels	1,318	4,559
Strawberries	Quarts	1,297,022	132,561
Pears	Barrels	58,194	65,243
Peaches	Bushels	81,716	71,149
Wool	Pounds	220,174	36,073
Honey	Pounds	543,036	49,581
Grapes	Pounds	487,492	40,760
Wine	Gallons	39,777	34,278
Moss	Bales	8,230	57,510
Lumber	Superficial Feet	348,964,675	3,901,537
Lumber (Overland)	Superficial Feet	131,241,300	1,312,418
Timber	Superficial Feet	156,545,006	1,346,328
Hewn Timber	Cubic Feet	702,507	88,199
Miscellaneous Timber	Cubic Feet		403,289
Cypress Lumber	Superficial Feet	12,689,000	253,780
Ash Lumber	Superficial Feet	120,000	2,400
Shingles	Number	32,342,050	953,403
Rosin	Barrels	53,786	109,468

TABLE NO. 12. (Continued.)

ARTICLES.	PACKAGES.	QUANTITIES.	EXPORT VALUATIONS.
Turpentine	Gallons	572,290	175,902
Crossties	Number	1,445,955	433,776
Phosphates	Tons	610,753	5,437,366
Cigars	Number	261,663,000	16,161,310
Cattle (to Cuba)	Number	48,922	749,308
Cattle (Overland)	Number	50,000	750,000
Chickens, Eggs (Cuba)			053
Sponges	Pounds	270,936	277,197
Tobacco	Bales	108	5,400
Tobacco	Tons	725	776,354
Tobacco (Overland)	Pounds	3,125,700	1,250,280
Hogs	Head	402	2,951
Fish (Fresh)	Pounds	7,599,386	227,796
Fish (Salt)	Pounds	238,189	7,730
Hides	Number	7,040	7,040
Horses, Mules (Cuba)	Head	1	100
Grits	Barrels	3,960	11,880
Fertilizers	Tons	2	050
Cotton Seed Meal	Pounds	170,000	1,700
Clay	Sacks	69,000	40,800
Fuller Earth	Tons	30,000	360,000
Total			$36,706,911

TABLE No. 18.

VALUE OF ALL PRODUCTS INCLUDING THOSE EXPORTED DURING 1897.

Total value of farm products	$ 17,906,060
Value of mine, forest and miscellaneous products	31,059,015
Total	$ 48,965,075

TABLE NO. 14.

EXPORTS OF FLORIDA PRODUCTS, BY PORTS, FOR 1897.

Pensacola.

Articles.	Unit of Quan ty.	Quantities.	Export Valuation.
Sawn lumber, foreign.....	Super. feet.	141,565,000	$ 1,810,868
Sawn timber, foreign.....	Super. feet.	144,130,000	1,226,270
Hewn timber, foreign.....	Cubic feet..	440,570	47,258
Miscellaneous timber, foreign	....	.....	403,289
Sawn lumber, U. S.....	Super. feet.	9,518,000	95,180
Phosphate, U. S.....	Tons.....	3,146	12,984
Cotton, foreign.....	Bales.....	7,520	225,600
	Total...	.....	$ 3,821,449

Apalachicola.

Sawn lumber, foreign.. . ..	Super. feet.	9,856,000	$ 115,167
Hewn timber, foreign.....	Cubic feet..	261,937	40,941
Sawn timber, foreign.....	Super. feet.	11,904 000	114.948
Rosin, foreign	Barrels.....	36,201	74.298
Spirits turpentine, foreign...	Gallons.....	26,546	7.602
Cattle (to Havana, Cuba)	Head.....	498	8,700
Hogs (to Havana, Cuba)....	Head.....	6	50
Chickens (to Havana, Cuba)..	Head.....	105	26
Eggs (to Havana, Cuba)....	Dozens.....	174	27
Sawn lumber, U. S. ports ..	Super. feet.	10,898.000	108,980
Sawn timber, U. S. ports....	Super. feet.	511.000	5,110
Lumber, cypress, U. S. ports.	Super. feet.	12,689,000	253,780
Lumber, ash, U. S. ports ...	Super. feet.	120,000	2,400
Shingle, U. S. ports.....	Number....	515,000	1,030
Rosin, U. S. ports.....	Barrels.....	17,585	35,170
Turpentine, U. S. ports.....	Gallons.....	45,750	18,300
Crossties, U. S. ports.....	Number.....	29,702	8,900
	Total.....	.....	$ 795.429

TABLE No. 14—Continued.

Key West.

Articles.	Unit of Quantity.	Quantities.	Export. Valuation.
Sponges, U. S. ports	Pounds	270,936	$ 277,197
Lumber, U. S. ports	Super. feet.	20,500	270
Shingles, U. S. ports	Number	45,000	127
Phosphate hard rock, foreign	Tons	42,975	427,962
Hides, U. S. ports	Number	7,040	7,040
Cigars, U. S. ports	Number	41,000,000	2,050,005
Fish (fresh) U. S. ports	Pounds	135,428	3,877
Fish (salt) U. S. ports	Pounds	238,189	7,730
Cattle (to Cuba)	Head	7,659	129,133
Hogs (to Cuba)	Head	396	2,901
Horses and mules (to Cuba)	Number	1	100
	Total		$ 2,906,342

Punta Gorda.

Phosphate, pebble, foreign	Tons	51,140	$ 511,400
Phosphate, pebble, U. S. p'ts.	Tons	50,147	501,470
	Total		$ 1,012,870

Tampa.

Phosphate, pebble, foreign	Tons	46,000	$ 230,000
Phosphate, hard rock, foreign	Tons	64,717	517,736
Phosphate, pebble, U. S.	Tons	58,071	290,355
Tobacco, U. S.	Bales	108	5,400
Tobacco, U. S.	Tons	725	776,354
Cigars, U. S.	Number	90,408,000	6,328,560
Cattle (Havana)	Head	40,500	607,500
Lumber, foreign	Super. feet.	424,763	4,248
Shingles, U. S.	Number	40,500	1,215
Fish (fresh) U. S.	Pounds	7,463,958	223,919
	Total		$ 8,985,287

Fernandina.

Phosphate, hard rock, foreign	Tons	169,980	$ 1,699,800
Lumber, foreign	Super. feet.	10,884,967	108,850
Lumber, U. S.	Super. feet.	50,470,838	504,708
Crossties, U. S.	Number	515,486	154,646
	Total		$ 2,468,004

TABLE No. 14—Continued.

Articles.	Unit of Quantity.	Quantities.	Export Valuation.
Jacksonville.			
Lumber, foreign	Super. feet.	7,509,000	$ 75,090
Crossties, foreign	Number	474,000	142,200
Shingles, foreign	Number	750,000	22,500
Grits, foreign	Barrels	3,960	11,880
Cattle, Havana	Head	265	3,975
Phosphate, foreign	Tons	406	4,060
Fertilizer, foreign	Tons	2	50
Lumber, U. S.	Super. feet.	107,817,607	1,078,176
Shingles, U. S.	Number	30,991,550	929,746
Crossties, U. S.	Number	426,767	128,030
Cotton, U. S.	Bales	1,565	46,950
Cotton seed meal, U. S.	Pounds	170,000	1,700
Naval stores, U. S.	Barrels	10,000	150,000
Clay, U. S.	Sacks	69,000	1,200
Vegetables, U. S.	Packages	53,900	55,000
Cigars, U. S.	Cases	3,255,000	162,750
Oranges, U. S.	Boxes	7,900	15,800
Pineapples, U. S.	Crates	8,400	42,000
	Total		$ 2,786,107
Brunswick			
Phosphate rock, foreign	Tons	46,129	$ 461,129
Savannah, foreign	Tons	78,047	780,470
	Total		$ 1,241,599
Total value of all exports			$ 24,017,087

TABLE NO. 15.

EXPORTS OF FLORIDA PRODUCTS, BY PORTS, FOR 1898.

Pensacola.

Articles.	Unit of Quantity.	Quantities.	Export Valuation.
Sawn lumber, foreign.....	Super. feet.	151,768.000	$ 1,587.770
Hewn timber, foreign.....	Cubic feet..	462.063	63,387
Sawn timber, foreign.....	Super. feet.	124,608,000	870,206
Pebble phosphate, foreign....	Tons.	50.704	193.695
Sawn Lumber, United States	Super. feet.	8.972.000	89,720
Turpentine, United States...	Gallons.....	408,761	155 503
Rosin, United States.....	Barrels.....	61.441	117,081
Pebble phosphate, U. S.....	Tons..	5,246	26,430
	Total.....	.....	$ 3,103,792

Apalachicola.

Sawn lumber, foreign.....	Super. feet.	15,419.000	$ 175,081
Hewn timber, foreign.....	Cubic feet..	189,377	22.936
Sawn timber, foreign.....	Super. feet..	9,465,000	91,675
Rosin.....	Barrels.....	64.341	93.502
Spirits turpentine, foreign..	Gallons....	77,567	25.457
Pickets, pine	Number....	5,260	59
Cattle (to Havana, Cuba)....	Head.....	280	5.505
Sawn lumber, U. S.	Super. feet..	8.526.000	85,260
Sawn timber, U. S.....	Super. feet..	425 000	4,250
Sawn lumber, cypress, U. S..	Super. feet..	7,555,000	151.100
Sawn lumber, ash, U. S.....	Super. feet..	75,000	1 125
Rosin.....	Barrels.....	22.874	45,748
Turpentine	Gallons.....	29,598	11,839
	Total.....	.....	$ 713.532

Carrabelle.

Sawn lumber, foreign.	Super. feet..	16,492,000	$ 157,599
Turpentiue, foreign	Casks	2,480	37,230
Rosin, foreign.....	Barrels.....	107.130	190,000
Cattle (to Havana, Cuba)....	Head	412	6,180
Turpentine, U. S.....	Gallons	840,000	250,000
Rosin, U. S.....	Barrels.....	27,818	66,763
Shingles, U. S.....	Number. ..	2.100,000	4.200
Fish (fresh on ice) U. S.....	Barrels.....	632	2.528
Fish (salt packed) U. S.....	Barrels.....	1.096	4,384
Oysters, U. S.....	Bushels	720	432
Oysters, U. S..	Gallons	1,000	500
	Total.....	.....	$ 719.618

TABLE No. 15—Continued.

Cedar Keys.

Articles.	Unit of Quantity.	Quantities.	Export Valuation.
Cattle (to Havana, Cuba).....	Head.....	450	$ 6,750
	Total....	.....	$ 6,750

Key West.

Sponge, U. S.....	Pounds ..	270,834	$ 276,250
Tobacco, U. S.....	Pounds	6,816	5,411
Lumber, U. S.....	Super. feet..	210,400	2,949
Shingles, U. S.....	Number....	17,000	62
Phosphate, foreign.....	Tons.....	12.568	125.644
Hides, U. S.....	Number....	8.000	8,000
Cigars, U. S.....	Number....	60,000,000	3,000,000
Fish (fresh) U. S.....	Pounds ...	16,000	775
Fish (salted) U. S.....	Pounds	236.713	7.140
Cattle (to Cuba).....	Head.....	11,391	174.502
Hogs (to Cuba).....	Head.....	551	3,366
Horses and Mules (to Cuba)..	Head.....	256	38.150
	Total.....	.....	$ 3,635,999

Punta Gorda.

Phosphate, pebble, foreign....	Tons.....	26,653	$ 266,530
Phosphate, pebble, U. S.....	Tons.....	40.662	406.620
	Total	.....	$ 873,150

Tampa.

Hard rock phosphate, foreign	Tons.....	44,774	$ 358,192
Pebble phosphate, foreign...	Tons.....	45.770	228.850
Pebble Phosphate, U. S.....	Tons.....	79,372	396,860
Lumber, foreign	Super. feet..	1.082,750	92,036
Shingles, U. S.....	Number....	245,200	7.356
Cigars, U. S.....	Number....	85,114,000	6,383,550
Fish (fresh)	Pounds.....	4,283,900	128.517
Tobacco.....	Bales.....	688	4,700
Tobacco (transported.).....	Tons.....	424	837,855
Cattle (Havana).....	Head	10.060	150,900
Horses and mules (Havana)··	Head... ...	6,451	645,100
	Total.....	.....	$ 9,233,916

TABLE NO. 15.—Continued.

Fernandina.

Articles.	Unit of Quantity.	Quantities.	Export Valuation.
Lumber, foreigh	Super. feet.	12,341.376	$ 123,414
Phosphate, foreign	Tons	183.310	1,833,100
Lumber, U. S.	Super. feet.	51,982,537	519,822
Crossties, U. S.	Number	1,694,758	508 427
Phosphate, U. S.	Tons	1,635	16,350
	Total		$ 3,001,113

Jacksonville.

Lumber, foreign	Super. feet.	8,683,000	$ 86,830
Shingles, foreign	Number	570,000	17,100
Pine Wood, foreign	Cords	265	520
Grits, foreign	Barrels	1,536	4,608
Orange Boxes, foreign	Packages	9,426	9,426
Oats, foreign	Bushels	3 460	1,730
Corn, foreign	Bushels	1.877	939
Hay, foreign	Tons	11	220
Cattle, foreign	Head	34	510
Building Brick, foreign	Number	168.000	16.800
Fertilizer, foreign	Tons	36	900
Lumber, U. S.	Super. feet.	103.929.056	1.039,291
Shingles, U. S.	Number	32,389.650	971.689
Crossties, U. S	Number	327,265	98,179
Cotton, U. S.	Bales	1.400	56.000
Naval stores (turpentine) U S	Gallons	79.000	23,700
Clay, U. S.	Sacks	90,808	90,808
Package Vegetables, U. S.	Packages	33,876	33 876
Fibre, U. S.	Bales	942	4,710
Orange boxes	Packages	29,250	29 250
Pineapples	Crates	1 000	5,000
	Total		$ 2 392.086

Other Ports (Adjacent).

Phosphate, foreign	Tons	130,186	$ 1,301,860
Phosphate, U. S (Overland).	Tons	46,587	465,970
	Total		$ 1,767,830

Overland Shipments.

Lumber	Super. feet.	98,769,000	$ 987,690
	Total		$ 987.690
Total			$26,435,674

Agriculture.

All things considered, the development and progress in the several branches of industrial activity in our State for the past two years has fully kept pace with other sections of the country. In 1897 the average yield of all crops of all sections of the State were considerable above the ordinary, and the prices received for farm and garden produce were for the greater part quite satisfactory; enabling those who still laboured under incumberances of past years, contracted for the most part under a false conception of farm economy and methods, to get rid of the galling and ever increasing burden of debt thus created; and although the year past has been in some localities a disastrous one to the cotton planters, there has been no actual want as a result, for our State, whenever put to the crucial test, has always proven her ability to sustain her people admirably and alone. The seasons are so arranged that failure of all crops in all sections at the same time is practically impossible; in truth, nature has so lavishly endowed her with all the requisite essentials to successful agricultural pursuits, that complete failure, as it is known in other sections of the United States, is literally unknown with us. Her soil is of such varied character that intelligent cultivation and management enables her farmers to produce an abundance and variety of crops unknown in any other portion of our country. It is these conditions that offer to the farmer, the stock raiser, the truck grower, the dairyman and the fruit grower profitable investment by a generous return for the labor bestowed on their development. As the amount of the per capita incumberance of a community would seem to indicate the financial condition of its people, it is interesting to know that of all the States in the Union, the debt per capita in Florida is the lowest but three, and in the charges for interest the lowest but four, and of all the Southern States east of the Mississippi river it is the lowest in both the average per capita incumberance and interest charges. Consequently the inference to be drawn is, that our people are in a fair financial condition. Certain it is that though they may not be blessed with a superabundance of ready cash, the great majority are well provided with the necessaries of life.

During the year 1897 the farms of the whole State were favored with good crops and profitable returns. The orange and lemon groves have put on new life with a vigor and

rapidity that has convinced the most skeptical that citrus fruit growing in Florida is still a very live industry as well as a most profitable one, for prices are better than for fourteen years, ranging from two dollars to seven dollars per box, depending upon the variety; and for the present year, 1898, they are still holding the same figure. Other fruits and the vegetable crops have done quite as well proportionately, the area planted in vegetables having materially increased, as well as the area set to pineapples and strawberries, both of which increase in acreage each year. I make the suggestion that our farmers continue to adhere too closely to the old ways and methods.

The time has come when success is oftenest easiest and surest obtained by those who keep pace with new ideas and modern progressiveness. The people who succeed best in every pursuit in these times are they who, in conjunction with their regular routine business, make specialties of some particular branch of their pursuits. In no instance is success so marked in this respect as with those who follow the several branches of agriculture, with a proper diversification of standard crops. One man will make cattle or horse raising his specialty, another tobacco, another dairying, another fruit growing of some particular kind, another of cane products, of poultry, or of broom corn, all of which, and many more, can be grown as a specialty, and really as a surplus crop, practically without extra cost or labor. It is in such things that the farmer will find a profit that he can place to the credit of the proverbial "Rainy Day," and brighten the prospect of a future, that comes all too soon, even though it be in the nature of things. A half dozen poultry farms in every county in this State, regardless of proportions, could not supply the demand for such products through four months of the year; this is an industry of which few realize its magnitude, and fewer still its profitableness.

There should be acres of broom corn planted in every county, and there should be a local factory to consume the product. The machinery for such a purpose is inexpensive, and the profit of growing the corn and manufacturing it into commercial form is large. If of good quality it readily brings in market 7 1-2 cents per pound, and the most ordinary article sells at 6 cents per pound; it costs no more in labor or money to grow than sorghum. So with the products of sugar cane; the syrup when properly prepared and put up sells at good prices, and wherever it comes in contact with the usual article of commerce at once supplants it, and asserts itself with a superiority that is ever afterward maintained. The great advantage to be derived by the farmer from the establishment of sugar

refineries in various parts of the State, for the purpose of working this cane up into sugar, has been set forth in every report of this department since its establishment, and at last it seems about to become a reality to a limited degree. To one who studies the subject without prejudice, it appears well nigh impossible that such an enterprise should fail of being profitable to the promoters in the highest degree. The assertion by doubting ones, that Cuba and the Sandwich Islands are a bar to success in such an industry in Florida, can only come of a lack of information on the subject, a fact which good business people have already or will at once discover upon investigation. It may be considered a certainty, and a reference to the tabulated statistics elsewhere will prove it, that Florida can and does produce a higher quality of cane for less labor and money than any other portion of the United States, or even in Cuba, where for years to come, and even then it must be under American methods of cultivation and manipulation, we need have no fear of dangerous competition.

If Cuba should become an independent government we will have a tariff to our advantage. or if it become a part of this country, we will have a full, even chance, with many conditions in our favor. With the Sandwich Islands, long distance transportation equals a moderate tariff, which is in our favor again, and last, having control of much the greater portion of the sugar producing area of the world, both the supply and the price to the world will practically be dictated by this country, in which case Florida will share with equal benefit. There need be no fear of serious competition from the beet sugar growers. Another specialty should be tobacco, grown in a moderate way by farmers, so that they can hold it for a market, or till time has been given it to change to a better product through natural processes. It is a crop that should be persevered with and pushed, for in a little while the demand will increase till it becomes a standard article of commerce. Our experience with it has not been more varied than with other new industries; all have to go through a certain amount of opposition till the merits of the particular article finally establish it on a firm basis.

Then our much discussed and criticised tobacco, already rapidly growing in public favor, will become an actual necessity to the world's commerce. As for Cuban competition, this department believes with good reason that it has at present as great if not greater influence over the demand and consumption of Florida tobacco as it will perhaps ever have, barring spasmodic operations of speculators, a thing to be encountered in all commercial affairs. Undoubtedly the time

is not distant when the demand for Florida tobacco will even be more persistent than the demand for her fruits and vegetables, or Sea Island cotton, regardless of the political status of Cuba. A diversification of crops is the farmer's best safeguard against the possibility of want, and nothing comes in so well in times of distress as help from a source out of the regular order.

Raising cattle for market is another industry that should receive more attention and encouragement. The supply of beef cattle, not only throughout this country but the world, has been steadily decreasing for the past decade, until the demand is exceeding the supply in the principal markets of this country. Every farmer who owns or rents a farm in this State should endeavor to raise a few head of cattle. The greater part of the food that they consume can and is usually supplied either without extra cost or labor; and there is no source from which it is easier to obtain a small sum of money when needed. It is not necessary to go into the business on a large scale to enable one to make money; it can be gradually and quickly built up. Yet, as an idea of what others think of the importance of this industry, there are several enterprising men in different sections of the State who are engaged, and others preparing to do so, in the raising of beef cattle for market, on a scale equal in every respect to the great cattle ranches of the West. People are interested with those who are putting immense sums of money into it, expecting to receive thousands in return. These people have spent months and years in investigating parts of this State as to its adaptability for successful stock raising, and all pronounce it superior to the best cattle districts of the West as an all the year round country for such purposes. Some of the most essential points in favor of Florida is said by these people to be, that the cold in winter kills fewer of them on the range; that they have to feed them only three months of the year, and that in Florida they can finish them up for market. Whereas, in the West after they have put on the growth, the stock must be driven north to Wyoming or the Dakotas to be put in a proper fattened condition for butchering. There are thousands of acres of land in this State in large tracts, adapted in the highest degree to cattle raising, where abundance of pure water is always to be had and stock will never suffer from thirst. In the more thickly populated States this industry can no longer be conducted on so large a scale. We have the grazing lands, the water and the climate distributed to a greater advantage than any other section or State, and our people should utilize them.

The same can be said with equal force of sheep and hog raising, but the farmer will have to choose between the cur dog and the sheep before he can embark in the business with the prospect of success that yields abundant profit.

We should have a pure food law in this State that will protect consumers against the numerous frauds continually being perpetrated. It would seem equally as necessary or just to protect our people against the so-called dairy products brought into the State; also the baking powders, syrups, jellies, vinegar and even flour that is now said to be adulterated with clays. Our State should not be the dumping ground for such frauds, that destroy the health of the people and takes their money for nothing. As the farmer is protected against fraudulent fertilizer, so should all consumers be protected against the possible purchase of deleterious foods and condiments.

The wholesale destruction of our forests, with no thought or provision for the future, is soon going to be a serious matter. It is one deserving of early and thoughtful consideration, and some system should be devised by which the forest areas can be maintained for generations. A comparatively few years more of wastefulness and our lands will have become arid wastes, and our rivers will in turn be destructive floods or arid channels; our crops will be uncertain, and both stock and crops and human life liable to injury and complete loss. Commerce and trade will be interfered with, and the same conditions prevail that have rendered many sections of the Old World a wilderness of barren waste of inert earth and sand. Under the prevailing methods, every time a tree is cut the wealth of the State is just that much depleted, with no hope of recuperation. If every man who cut down a tree was compelled to plant another in place of it, then would our trade in fruit product be a source of inexhaustible wealth; and any law or system which compells such a course will be a benefaction to our State.

For the guidance of those persons engaged permanently in the fisheries industry, and for the information of those who indulge in sport, I suggest that it would be a very proper and desirable act for the Legislature to authorize the publication of all the Game, Fish and Trespass laws in such form that they could be freely distributed. There would be no excuse for the claim of breaking the law unintentionally, and because the law's requirements were unknown to the offending party. It is also a protection to those regularly engaged in the fishing business. The large amount of money invested in this industry rightfully demands consideration. An indication of the

importance of this business is disclosed by the following facts: At the beginning of 1898, there were over 5,200 persons engaged in the business. Their outfit consisted of more than 200 vessels, 2,325 boats and necessary apparatus for conducting their business, the value of which was upwards of $770,000. The total number of pounds of their catch for the year to that date was a fraction over 32,000,000, at a valuation of $990,000 in round numbers; of this amount, $512,723 were shipped beyond the State.

A branch of this industry that requires immediate attention is the sponge fisheries. Unless something is done to protect them during certain stages of growth, the sponge fisheries of the Gulf will soon be a thing of the past.

In my last report I referred to the necessity of a State Geological Bureau, and I feel it my duty to do so again, for if we have needed the services of such a Bureau in the past, we need it now more than ever. Nothing adds to the population and wealth of a State like the development of its mineral resources; through its talismanic influence material prosperity grows apace. Heretofore we have relied upon chance and the enterprise of individuals to bring to light the riches of the earth. But the time for old methods has passed. Every State which has evidences of mineral wealth has her Geological Bureau. It is best that investigation of this kind should be under the control and direction of the State, because it gives confidence to the capitalist. The belief is universal that Florida is rich in mineral resources; and if so, it is the duty of the State to place them in the way of development. Not to do this is false economy, and if for the lack of interest in it on our part capital gives us the go-by, and passes on to those communities which are progressive and enterprising, then we should not complain. The question is, shall we do without the millions of wealth that it brings to our people for the sake of the paltry sum it will require to secure it. A bill was introduced in the Legislature of 1897 for the establishment of a Geological Bureau, but the time of the session was so taken up with the Senatorial election that it failed to pass, though it had been favorably reported by the appropriate committee.

Another subject referred to in our report of 1897, was the advisability of encouraging the holding of "Farmer Institutes" wherever the people of the several counties shall appoint. The expense of carrying on or directing these meetings is not great, and would cost the State very little, and are productive of much good. Through them, those engaged in agricultural pursuits have an opportunity to acquire information that they could obtain under no other circumstances, for no other method of imparting information makes so much

impression upon the average man or woman as that gained through the medium of a lecture, or the open discussion of a subject, especially if that subject be one of importance and interest to the community. This subject deserves favorable consideration at the hands of the Legislature, and I earnestly recommend it.

The business of this department is growing to such proportions that the appropriations for postage, seeds and stationery, and also the appropriation for printing, has become too small to enable the Commissioners to carry on the business as it should be. Were the printing fund increased to $1,000, the department could publish small pamphlets of information on subjects for which ordinary letters will not answer, because either too lengthy for full explanation, or required in too large numbers to admit of furnishing the information in such a manner. The correspondence and demand for printed matter have grown so large that the usual appropriation is not sufficient to pay the postage expenses of the department; so I therefore recommend to the Legislature that both of the appropriations for the purposes above mentioned be increased to $1,000 each.

It has been generally supposed that the conflict with Spain during the past year would have the effect of reducing the volume of our exports, but a glance at the tables covering this head will disclose the fact that there is quite a large increase over the business of 1897. In the tables referred to much information of value and interest will be found by those interested in commercial affairs. No other character of business so truly reflects the financial condition of a people as their trade with the outside world. Measured by that rule, Florida has cause to congratulate herself on the showing she has made for the past two years.

The Meteorological report of the State, as compiled by Prof. A. J. Mitchell, Director of the U. S. Weather Service at Jacksonville, for the past two years, are again published as a portion of this report. The information embraced therein is so much sought after by both residents and non-residents of the State, that inquiries upon the subject can be answered readily in no other way so well as by their publication in this form.

In closing this report of the work of the department, it affords me genuine pleasure to tender my grateful appreciation and sincere thanks to all those who have contributed to the successful operation of the department; and especially to the Tax Assessors of the several counties, our corps of crop correspondents, who have so faithfully given of their time and labor, and to the Collectors of U. S. Customs of the several ports.

Meteorological Report

OF THE

STATE OF FLORIDA

For the Years 1897 and 1898.

U. S. DEPARTMENT OF AGRICULTURE.

Climate and Crop Service of the Weather Bureau. Florida Section, A. J. Mitchell, Observer and Section Director, Jacksonville, Fla.

ANNUAL SUMMARY FOR THE YEAR 1897.

ATMOSPHERIC PRESSURE IN INCHES AND HUNDREDTHS.

The average atmospheric pressure for the year was 30.09 inches. The highest monthly mean for the State was 30.21 inches in January and December; the lowest, 29.98 inches in June, July and October. The highest barometer reading during the year was 30.67 inches at Pensacola on February 27th; lowest, 29.64 inches, February 5th, giving a range of 1.03 inches.

AIR TEMPERATURE.

The annual mean temperature for the State for 1897 was 71.2 degrees, which is slightly above the normal. The highest annual mean, 78 degrees, occurred at Key West. The lowest yearly mean, 67 degrees, is reported from DeFuniak Springs. The highest monthly mean was 85 degrees at Lake City in June, Mullet Key in July, and Orange City in August. The lowest monthly mean was 48 at Amelia, DeFuniak Springs and Milton. The highest and absolute temperature, 104 degrees, occurred at McClenny on August 2nd; lowest, 17 degrees, at DeFuniak Springs and Pensacola on January 27th and 28th, respectively; range for the State, 87 degrees.

The coldest month was January, averaging 56 degrees; the warmest was July, mean temperature being 82 degrees. The annual thermal data by sections were: Northern, 70.1 degrees; Central, 72.1; Southern, 74.9, and Western, 67.9 degrees.

PRECIPITATION.

The precipitation averaged over the State, for the year, 56.69 inches, which is four (4) inches above the normal. The excess is due, in a great measure, to the phenomenal rainfall during September, which was incidental to the northward movement of several cyclonic disturbances. Considering the various months the following facts are developed: Rainfall

was above the normal in February, April, July, August, September and December. The greatest average monthly amount was 10.71 inches in September; the least average monthly total was 1.84 inches in November. The greatest monthly total was 23.01 inches at Sebastian in September; the least, 0.00, at Oxford in March. The greatest yearly total was 87.07 at Jupiter; the least, 40.30 inches, at Mullet Key. The annual rainfall by sections was: Northern, 57.78 inches; Central, 51.84; Southern, 63.59, and Western, 53.56 inches.

WIND AND WEATHER.

Prevailing wind direction during 1897 was from the northeast. The maximum wind velocity recorded at Weather Bureau stations was 51 miles from the southeast at Jupiter, on February 5th. The total annual movement of wind at Jacksonville was 67,415; Jupiter, 87,435; Key West, 85,349; Pensacola, 84,165, and Tampa, 57,848 miles. It is seen that the average hourly velocity is greatest at Jupiter and least at Tampa.

MISCELLANEOUS.

Thunderstorms were numerous during the spring and summer. Reports of fog were less than usual.

No severe hail storms occurred.

Killing frosts occurred during January and February at Archer, Bartow, Brooksville, Clermont, DeFuniak Springs, Earnestville, Emerson, Eustis, Grasmere, Haywood, Huntington, Jacksonville, Kissimmee, Lake City, Manatee, McClenny, Merritt's Island, Milton, Mullet Key, New Smyrna, Oak Hill, Ocala, Orange Park, Orlando, Plant City, St. Francis, Switzerland, Tallahassee, Tarpon Springs and Tampa. The first killing frost of autumn was reported during December at Archer, Brooksville, DeFuniak Springs, Haywood, Lake City, Oak Hill, Ocala, Orlando, and Plant City.

CLIMATOLOGY OF THE YEAR 1897.

The climatic history of 1897 presents no radical departures from average conditions. On the contrary, the year was almost devoid of severe cold waves and cyclones, such as, in the past, have severely damaged the varied interests of the State. The coldest weather was experienced during the last decade of January, when minimum temperatures of 17 degrees were recorded over western counties. Fortunately overcast skies prevailed during the cold wave which, in conjunction with timely warnings, proved of a great value to vegetable

and fruit interests. The progress of the season was uneventful during the spring months, eliminating the fact that March gave an excess of heat with deficient rainfall, while thermal conditions were about normal during April, with rainfall exceeding the general average by nearly two inches. May was rather cool, with precipitation deficient. The heaviest rainfall during month occurred in Dade county.

June, July and August gave the usual summer temperature, an excess of heat being noted in June, with slight departures for the two last named months. The maximum heat—104 degress—occurred in August. The distribution of moisture for the same period lacked uniformity. Compared with 1896, June shows a deficiency of more than five inches, while conditions for July and August varied, excesses and deficiencies being indicated over detached sections. September temperatures averaged but slightly below the normal, with a decided excess in rainfall, amounting to three inches. The maximum monthly amount was 23.01 inches at Sebastian. The formation of frost over western interior counties on the 21st, was an unprecedented occurrence. Considering authentic data only, no previous similar record was ever made. October, November and December were pleasant, and generally favorable for harvesting, the only noteworthy feature being that November was several degrees cooler than the established average.

STORMS OF THE YEAR.

No severe winter storms prevailed, and the only disturbances worthy of mention obtained during September, when two well defined tropical cyclones threatened the State. Only one was felt to any serious extent.

The first one appeared in the Central Gulf on the 11th, and possessed distinctive features of an energetic cyclone disturbance. Following the course of least resistence, however, it moved to the northwest and, striking the coast of Texas, killed a number of people and caused great loss of property.

The second storm of September gave evidence of its existence on the 20th by slowly falling pressure at stations of the East Gulf. During the night of the 20th the storm moved rapidly east-northeast, doing great damage to citrus fruits, tobacco and vegetable interests in Polk, Orange, Osceola, Brevard, and Dade counties. The center passed to the south and east of this station about 5:30 a. m. of the 21st. Cocoa, Brevard county, suffered more than any section traversed, the loss sustained to property at that point being $10,000, and consisted in demolished dwellings, stores and other structures.

Several miraculous escapes from death were reported. Excessive rains and fierce electric displays were attendant characteristics.

ANNUAL AVERAGE TEMPERATURE AND PRECIPITATION

During the past six years, deduced from Weather Bureau and voluntary meteorological stations:

Year.	Average Temperature: degrees and tenths.	Average Precipitation: inches and tenths.
1892	70.4	48.0
1893	71.0	53.0
1894	71.2	52.5
1895	69.9	45.5
1896	71.0	49.6
1897	71.2	54.1

From these data we see that 1895, the year of the cold wave in February, which caused so much injury to the fruit interest of the State, was the coolest and dryest.

CLIMATOLOGICAL DATA FOR THE YEAR 1897.

STATIONS.	Elevation, feet.	Temperature (degrees Fahrenheit).							Precipitation (Inches).						Number rainy days.	Sky.			Prevailing direction of wind.
		Length of record, years.	Annual mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Length of record, years.	Total for the year.	Greatest monthly.	Month.	Least monthly.	Month.		Number clear days.	Number partly cloudy days.	Number cloudy days.	
NORTHERN SECTION.																			
Amelia	10	5	69.3a	.....	99	.....†	23	Jan. 28	5	62.78a	20.88	Sept.	.89	May	70	125	159	51	se
Archer	92	5	70.5	+1.4	99	July 2	22	Jan. †	5	50.03	8.78	Sept.	.53	May	100	112	228	25	sw
Emerson	...	....	69.4e	....	...	.....	†	Jan. 29	....	39.92e	8.49	Sept.	.93	May	...	....	....	....	.....
Federal Point	10	5	79.5	....	97	June †	24	Jan. †	5	64.47	17.30	Sept.	1.31	Mar.	123	84	192	89	ne
Huntington	50	1	71.5	.....	100	June 29	26	..do...	1	57.15	12.29	Sept.	.52	Mar.	107	158	143	64	.....
Jacksonville	43	27	70.2	+1.6	99	Jul Ang†	21	.do·..	27	60.70	16.23	Sept.	.82	May	132	132	140	93	ne
Jasper	165	....	.....	.....	...	.....	...	.....	....	.....	.....	.....	.....	.....	...	....	....	....	.....
Lake Butler	...	1	69.2b	.....	99	June †	21	..do...	1	47.41a	8.77	Feb.	1.15	Nov.	55	146	126	63	... ..
Lake City	210	9	71.7	+3.2	101	June 1	20	..do...	9	54.08	12.79	Feb.	.66	May	91	75	188	102	sw
Macclenny	140	1	70.2	.....	104	Aug. 2	21	..do..†	1	65.91	12.11	Aug.	1.20	May	83	112	204	49	sw nw
Orange Park	25	3	70.0	.....	99	June 30	22	Jan. †	3	39.31a	12.70	Sept.	.66	Nov.	98	170	111	84	se
Savannah	56	26	67.5	+0.8	102	July 1	17	Jan. 28	26	54.08	8.10	July	.71	Nov.	122	161	71	133	sw
St. Augustine	10	46	69.4	+0.9	99	....do....	22	..do...	46	55.10	12.97	Sept.	1.24	Mar.	77	....	....	....	sw
Switzerland	...	....	.....	.....	...	.....	...	.....	...	42.25e	13.79	Sept.	1.46	June	...	....	....	....	.....
Entire Section	....	....	70.1	.....	104	Aug. 2	17	..do...	....	57.78	20.88	Sept.	.52	Mar.	96	128	156	81	sw
CENTRAL SECTION.																			
Bartow	...	1	72.7	.....	98	Aug. 19	28	Jan. 10	1	58.59	14.55	July	.44	Mar.	94	120	202	43	s
Brooksville	328	5	71.4	.....	96	June 29	24	Jan. 28	5	55.27	11.98	July	.90	May	96	208	126	31	w

Clermont	...	5	73.6	.....	101	....do....	26	..do...	5	47.21	8.48	Sept	.45	Mar.	85	122	191	52	ne
Earnestville	193	2	72.6	.....	99	Jnne †	25	..do...	2	59.55	11.33	July	1.04	Mar.	123	155	124	86	sw
Eustis	180	6	72.0	+1.4	98	Aug. 19	25	..do...	6	55.52	12.32	Sept.	1.22	Nov.	109	127	119	119	ne
Ft. Meade	125	3	70.6	+0.0	94	.....†	26	Jan. †	3	51.28	16.36	Sept.	.59	Mar.	95	180	133	52	ne
Gainesville	178	5	73.2b	+5.6	102	June 25	36	Dec. 7	5	39.23b	7.29	Sept.	.96	Mar.	81	186	47	73	ne
Grasmere	175	6	71.6	.....	99	June 18	25	Jan. 23	6	47.95	10.96	Sept.	1.31	Nov.	98	268	62	35	ne
Kissimmee	65	6	72.4a	−1.2	98	July 4	27	Jan. 28	6	51.70	15.20	Sept.	.18	Jan.	60	175	162	28	w
Merritt's Island	20	12	73.7	+1.1	95	July 2	29	..do...	12	59.09	17.97	Sept.	1.16	May	86	245	61	59	se
Minneota Park	...	2	73.7	.. .	99	June 19	30	Jan. 29	2	43.39	10.01	Sept.	.39	Mar.	101	104	209	52	sw
Mullett Key	15	5	73.3	.....	94	July 3	32	Jan. 28	5	40.30	8.69	Sept.	.27	May	71	121	118	46	ne
New Smyrna	20	6	70.7	−0 2	99	June 14	26	. do..†	6	56.40	17.03	Sept.	.32	Mar.	82	135	147	69	ne
Oak Hill	25	3	73.7	.....	...	.....	...	.....	3	.....	.....	.....	.....	.....	82	120	202	69	ne
Ocala	150	7	70.7	+0.6	...	.....	...	.....	7	49.70	9.83	Sept.	.53	Nov.	104	128	166	71	sw
Orange City	50	5	72.6	+2.8	100	June 23	25	..do...	5	51.32	14.03	Sept.	.76	Mar.	88	212	87	66	se
Orlando	98	5	69.9	−0.9	99	July 2	25	Jan. 27	5	53.57	15.77	Sept.	.38	Mar.	112	191	107	67	w&e
Oxford	...	4	71.5	.....	..	.....	...	.....	4	48.58	14.00	Sept.	.....	Mar.	41	83	227	55	s
Plant City	121	4	72.1	.....	98	June 29	28	Jan. †	4	54.49	8.48	Sept.	.87	Jan.	95	170	115	80	e
St. Francis	20	1	70.3	.....	99	July 1	28	Jan. 28	1	53.99	12.97	Sept.	1.24	Mar.	95	203	147	15	ne
Sebastian	36	....	.....	.....	...	.....	...	.....	....	57.21d	23.00	Sept.	2.27	Dec.	...	.....	.....	.....	.....
Tampa	20	8	72.2	−0.5	94	Aug. 15	29	Jan. 29	8	54.41	10.73	Sept.	.33	May	120	151	163	51	ne
Tarpon Springs	20	12	71.3	+0.4	96	†	28	..do...	12	44.48	10.55	July	.32	May	98	170	111	84	w
Entire Section	...	....	72.1	. . .	102	June †	22	Jan. 28	....	51.84	23.01	Sept.	....	Mar.	91	162	138	65	ne
SOUTHERN SECTION.																			
Boca Raton	6	....	76.5b	.....	91	.....†	49	Dec. 29	....	61.45b	15.97	Sept.	.13	Mar.	103	119	155	24	se
Estero	16	....	.....	.....	...	.....	...	.....	...	.....	.....	.....	.....	.....	...	.....	.....	.....	.....
Jupiter	28	10	74.0	+2 0	93	Aug. 12	34	Jan. 29	10	87.07	18.09	Sept.	1.96	Dec.	134	87	161	117	s
Key West	22	26	77.2	−1.0	94	†	51	..do...	26	46.46	9.11	Sept.	.38	Mar.	117	137	160	68	se
Lemon City	15	2	74.3b	.....	93	June †	38	..do...	2	62.45a	20.35	Sept.	.75	Mar.	108	119	141	105	s
Manatee	16	4	67.8c	.....	...	.....	26	..do...	4	38.78	11.74	July	.50	Oct.	70	145	121	40	.....
Myers	...	13	73.5	−0.9	93	June 18	33	. do...	13	57.17	13.82	July	.73	Nov.	85	272	63	30	e
Entire Section	...	....	74.9	.....	93	†	26	Jan. 29	...	63.57	10.35	Sept.	.13	Mar.	103	146	134	85	s
WESTERN SECTION.																			
Carrabelle	12	1	73.4e	...	96	.....†	36	Dec. 6	1	34.80e	10.60	Sept.	T	Nov.	26	181	25	38	ne&w

CLIMATOLOGICAL DATA FOR THE YEAR 1897.—Continued.

STATIONS.	Elevation, feet.	Temperature (degrees Fahrenheit).							Precipitation (Inches).						Number rainy days.	Sky.			Prevailing direction of wind.
		Length of record, years.	Annual mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Length of record, years.	Total for the year.	Greatest monthly.	Month.	Least monthly.	Month.		Number clear days.	Number partly cloudy days.	Number cloudy days.	
DeFuniak Springs.	193	1	67.2	.....	102	June 19	17	Jan. 27	1	60.55	12.41	Aug.	1.25	May	89	57	253	55	.....
Haywood	...	....	70.1e	.....	96	.....†	33	Dec. 28	....	41.25b	9.32	Aug	.71	Oct.	64	81	49	71	e
Milton.....	100	1	68.9a	.....	...	.....	..	.....	1	60.08a	13.23	Feb.	1.13	May	95	64	151	129	s
Mobile, Ala.....	35	27	67.7	+0.7	101	Aug. 3	48	Jan. 28	27	63.18	11.56	Aug	2.12	†	121	153	87	127	se
Montgomery, Ala..	219	25	66.5	+1.1	102	....do....	14	..do...	25	46.25	12.02	Mar.	.55	Oct.	105	174	107	84	se
Pensacola	56	18	68.6	+3.1	98	June 21	17	..do...	18	40.69	10.26	Feb.	.74	Feb.	116	131	150	94	sw
Perry.....	300	....	.....	.....	...	.....	..	.....	....	14.37g	4.35	Sept.	1.11	Aug.	....	....	...	....	.....
Quincy	260	....	.....	.....	...	.....	..	.....	....	33.75g	12.40	Feb.	2.98	May	....	....	....	....	.....
Tallahassee.....	193	13	67.9	+0.9	97	June †	19	..do...	13	59.33	10.45	Feb.	.43	May	98	111	170	84	s & sw
Wausau	250	....	.....	.....	...	.....	..	.....	....	16.04g	9.50	Aug.	.25	Oct.	...	....	....	....	.....
Entire Section...	...	....	67.9	.....	102	†	17	Jan. 28	....	53.56	13.23	Feb.	T	Nov.	89	118	123	85	s & sw

All records are used in determining state or district means, but state and district departures are determined by comparison of current data of only such stations as have normals. † More than one date. T Less than .01 inch.

Letters denote the number of months data are missing. ‡ Means from 7 a. m., 2 p. m. and 9 p. m.

STATIONS.	Jan.		Feb.		Mar.		Apr.		May.		June.	
	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.
NORTH'N SECTION												
Amelia	47 8	.....	56.7	....	65.8	....	67.0	....	72.0	....	81.2	....
Archer	52 7	—2.5	61.5	—0.7	70.8	pl9.2	70 2	pl2.7	72 7	—1.2	81.8	pl3.0
Emmerson	50 4	.....	59.8	....	68 8	....	68 8	....	74 4	....	81 4	....
Federal Point	53 0	.....	62.0	....	68.4	....	67 4	....	71 4	....	80 9	....
Huntington	54.4	.....	63.0	....	71.4	....	70.6	....	74.7	....	83 2	....
JACKSONVILLE	52 1	—3 2	60.0	pl0.2	68.8	pl6.7	69 0	pl0.3	73 2	—2.0	83 4	pl3.3
Jasper	....	.....	...	....	....	....	....	....	....	....	....	....
Lake Butler	50 6	.....	60.2	....	68.0	....	71.2	.....	72.7	....	80.8	....
Lake City	52 4	—3 6	60.8	pl3.9	71 5	pl9.1	71 9	pl3.0	77.4	pl2.2	85 2	pl4.5
McClenny	50 8	.....	59.9	...	69 2	....	68 4	....	73 9	....	84 0	....
Orange Park	52.3	.....	63.6	....	69 0	....	69 8	....	72.6	....	82 7	....
Savannah	48 2	—3 4	56 6	pl0.8	62.8	pl4.1	66.2	pl0.1	72 8	—0.8	81.8	pl2.5
St. Augustine	52 0	—4 4	59.8	—0.9	67.8	pl6.2	67.0	—1.7	72.1	—0.7	81 0	pl3.0
Switzerland..(1)	....	.....	....	....	....	....	....	....	....	....	c81.5	...
CENTR'L SECTION												
Bartow	57.6	.....	66.4	....	72.5	....	71.2	....	74.7	....	82 0	....
Brooksville	55 5	.....	63.6	....	71 0	....	71 0	....	75 6	....	81.2	....
Clermont	56 7	.....	65 8	....	73 8	....	72 0	....	76 7	....	83 6	....
Earnestville	56 6	.....	65 8	....	72 8	....	71.3	....	76.4	....	82 8	....
Eustis	55 6	—1 4	64 9	pl0.5	71.8	pl8.5	70 7	—0.6	75 0	—0.9	82 6	pl3.6
Fort Meade	56 4	—2 0	63.9	—0 1	70 3	pl5 5	69 0	pl0 1	73 1	pl0 5	79.6	pl1 1
Gainesville	....	.....	.....	....	69.0	pl8.0	69 2	pl2 3	75.4	pl5 0	84 9	pl7 1
Grassmere	55 8	.....	64.5	....	71 9	....	71.2	....	75 2	....	83 6	....
Kissimmee	53 8	—7 0	69 0	pl6.6	74 8	pl7 9	75 3	....	72 6	....	....	....
Merritts Island	59.2	—3 3	66 2	pl0 0	73 4	pl7.0	72.4	pl0.2	75.8	pl0.0	81.9	pl3.2
Mineota Park	59 0	.....	67 2	....	74.2	....	72 5	....	75 4	....	82 4	....
Mullet Key	57 4	.....	64.0	....	71 8	....	71 7	....	76.2	...	84 3	....
New Smyrna	54 9	—6.7	63 0	pl0.6	70.0	pl4.0	70.5	—1 7	72.2	—3.3	79 0	—1.9
Oak Hill...(1)	58 8	.....	64 8	....	70 9	....	72.0	...	76 1	....	82 1	....
Ocala	53 7	—4.3	62.6	—0.5	69 8	pl6 5	69.8	pl0 5	74 5	pl1.1	81 2	pl2.7
Orange City	55.6	—1.9	64 6	pl0 1	72 0	pl6.8	71 8	pl0.8	75 6	pl1 3	84 8	pl6 0
Orlando	55 0	—4.9	63 3	—0 0	70.9	pl3 5	68 4	—3 1	72.8	—2 7	79.4	pl1.0
Oxford (1)	54 9	.....	63 6	....	71 3	.....	71 9	....	75.4	....	83 0	....
Plant City	57 5	.....	64.8	....	70 0	....	71.4	....	75.0	....	81.6	....
St. Francis	53 8	.....	64 4	....	69 8	....	68 3	....	71 1	....	80 0	....
Sebastian	....	.....	....	....	....	....	....	....	k76.0	....	83 2	....
Tampa	57 6	—1.0	65.2	pl2 0	71 9	pl1.0	70 3	—1.0	74 4	—1 0	81.0	pl1.0
Tarpon Springs	55.4	—4.0	64.6	pl0 6	71.5	pl7.1	69 8	—1.7	72 6	—3.0	79 8	—2.0
SOUTH'N SECTION												
Boca Raton	....	.....	....	....	73.7	....	73.3	....	75.8	....	80.6	....
Estero....(1)	....	.....	....	....	....	....	....	....	....	....	....	....

YEAR 1897, WITH DEPARTURES FROM THE NORMAL.

July.		Aug.		Sept.		Oct.		Nov.		Dec.		Annual.	
Temperature	Departure.	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.
82.1	....	80.0	....	75.4	....	70.2	....	64.3	....	.....	.....	69.3	.....
81 7	pl6.2	81 7	pl.05	76 0	−3.6	71.6	pl0.0	64 5	pl1.7	58.6	−0.4	70.5	pl1.4
82 1	....	....	....	....	....	....	....	....	...	.....	.....	69 4	.....
86 8	....	80 4	....	75.0	....	71 2	....	65 0	....	58 6	.....	69 5	.....
83 0	....	82 3	...	76 2	....	72 7	....	66 6	...	a60 1	.....	71 5	.....
80 3	pl4 2	82.2	pl1 1	76 3	−1.4	71 7	pl2.0	65 3	pl4 0	58 5	pl2 4	70.2	pl1 6
....	...	....	...	....	....	....	....	...	....	.....	.....	.....	.....
82.8	....	....	....	76 2	...	73 8	....	....	....	55 4	.....	69 2	.....
83 2	pl3 4	82 5	pl2.3	76 7	−1 2	72 5	pl3 4	66 2	pl7 1	59 6	pl0 6	71 7	pl3 2
82 8	....	83 0	...	76 1	....	72.1	....	64 2	....	57.4	.....	70 2	.....
81 9	....	81.5	...	75 6	....	70 4	....	63 7	....	57 0	.....	70 0	.....
82 0	pl0 1	81 0	pl0 8	74 2	−1 7	69 2	pl2 8	61 2	pl3 3	53 7	pl1 4	67 5	pl0.8
81 4	pl0.9	80 2	pl0 1	75 3	−1.9	71 4	pl4.9	66 2	pl3 1	58.7	pl0.3	69 4	pl0 9
81 8	....	79.1	....	k72.8	....	69 1	....	63 5	....	55 4	....	.....	.....
82.9	....	82 5	....	78.6	....	73 6	....	68.5	....	61.8	.....	72.7	.....
81 6	....	81.2	....	76 9	....	71.8	....	67 0	...	60 2	.....	71 4	.....
83 1	....	83 0	....	78 6	....	74 8	....	69 6	....	k65 8	.....	73 6	.....
82 9	....	82 2	....	77 6	....	73 1	....	68 0	....	61 4	.....	72 6	.....
82.0	pl0 7	82 5	pl1 5	77 2	−0 3	73.3	pl2 8	67 3	pl3 4	61 5	pl1 0	72 0	pl1.4
79 6	pl0 0	....	....	77.2	−1 3	72 7	pl0 7	68 2	pl2 2	66 6	pl5 9	70 6	pl0 0
83 4	pl4 3	82 6	pl4.5	75 7	−0 5	70 8	pl2 3	64 3	pl3 3	57 2	−0 4	73 2	pl5 6
83 1	....	82 9	...	77 4	....	71 4	....	67.4	....	61 2	.....	71 6	.....
83 6	pl0.6	83 9	pl1 3	78 7	−1 5	75 6	pl0 9	69 0	pl0.9	63 1	pl0 5	72 4	−1 2
82.7	pl1 7	83 0	pl1 8	78 8	−1 0	74 8	−0 6	71 4	pl3 5	67 2	pl1 7	73 7	pl1 1
81 2	....	81.4	....	79 4	....	75 2	....	70 5	....	65 7	.....	73.7	.....
85 0	....	83 4	....	78 5	....	74 3	....	70 0	....	63 2	.....	73 3	.....
80 6	−0 5	79 8	pl1 1	76.6	pl2 3	72 8	pl0.3	67 4	pl1 6	61 2	−0 7	70 7	−0 2
83.1	...	82 5	....	79 7	...	75.9	....	72 7		66 0	....	73 7	.....
80 5	−0 3	70.4	pl0 0	75 8	−1 8	72 8	pl1 9	67 2	pl3 8	60 5	pl2 1	70 7	pl0 9
83 0	pl1 6	85 2	pl4 1	77 4	−2 5	72 7	pl0 5	67 2	pl5 4	61 1	pl0 6	72 6	pl2 8
79 9	−2 0	80 4	pl1 0	73 0	−3 6	70 8	−2 1	64 8	pl1 5	58 6	−3 1	69 9	−0 9
82 4	....	81 4	....	75 8	....	71 8	....	65 9	....	60 3	.....	71 5	.....
81 4	....	81 1	....	78 0	....	72 8	....	68 6	....	62 6	.....	72 1	.....
79 6	....	81 1	....	76 4	....	72 5	....	66 2	....	60 5	.....	70 3	.....
82 4	....	83.4	....	78 5	....	74 9	....	70 5	....	66 5	.....	76 9	.....
81 6	pl0 0	81 6	pl0 (	77 6	−2 0	73 6	l0 0	69 0	pl1 0	62 5	pl0 0	72 2	pl5 0
81 8	pl0.0	81 8	pl0 5	78 9	−0 3	72 4	−0 2	67 0	pl2 0	59.4	−1 3	71 3	pl0 4
81.2	....	81.6	....	78 8	....	75 2	....	73.8	....	70.6	.....	76.5	.....
....	....	....	....	77 2	....	73 6	....	70 2	....	64 6	.....	.....	.....

STATIONS.	Jan.		Feb.		March.		April.		May.		June.	
	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.
Jupiter	63.0	—4.4	69.0	pl2 2	73.0	pl3 2	72.0	—2 2	75.0	—1.5	81 0	pl2.0
Key West	68 6	—2 7	72 7	—0 9	76 5	pl3 9	75 5	—0 1	77 8	—1 9	82.2	—0 3
Lemon City	60 0	....	70 2	....	74 2	....	f 74.2	....	....	....	81 8	....
Manatee	56 6	—5 0	64 0	—0 2	70 3	pl5.0	69 9	—1 7	72 2	....	....	
Myers	61 2	—1 6	68 7	pl2 6	73 0	pl3 0	72 5	—0 8	75 6	—3 5	80 6	—0 4
WEST'N SECTION.												
Carrabelle	....	....	....	....	....	....	....	....	....	....	82.9	....
DeFuniak Sp'gs.	48.2	....	57 2	....	65.8	....	64.9	...	71.2	....	82 4	....
Haywood	....	...	....	....	65 7	....	66 7	....	....	....	....	....
Milton (1)	48 4	....	57 0	....	67 4	....	65 0	....	70 6	....	82 1	....
Mobile	48 2	—2 9	55 3	—0 2	66 2	pl0 0	65 6	—2.0	71 2	pl2.8	80 8	pl1 1
Montgomery	44 8	3 3	4 0	pl0 4	63 0	pl5 5	64 0	—1 9	71 1	—2 2	82 6	pl3 1
Pensacola	49 6	—2 9	56 8	pl0.0	66 3	pl6 8	66 4	—1 3	71 7	pl0 1	80 9	pl1 5
Perry	....	....	...	....	....	....	....	....	....	....	....	....
Quincy	....	....	55 7	....	66 6	....	d70.9	....	78 8	....	....	....
Tallahassee	48.8	—2 5	57.2	—1.4	65.9	pl5 2	65.4	—2 3	72 4	—1.6	82 0	pl4.2
Wausau	....	....	....	....	....	....	....	....	....	....	....	....

(1) Thermometer not self-regis ering.

YEAR 1897, WITH DEPARTURES FROM THE NORMAL.—Continued.

July.		Aug.		Sept.		Oct.		Nov.		Dec.		Annual.	
Temperature	Departure.	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.
81.0	—0 3	82 6	pl0 7	78 0	-1 7	75 0	—1 0	73 0	11 6	69 0	pl2 0	74.0	pl2.0
82 6	—1 1	83 8	—0 1	80 6	—1 7	78 5	pl0 0	75 6	11 5	72 4	pl2 5	77 2	—1 0
....	....	183.8	....	79 7	....	74 3	....	74 4	....	70 4	.....	74 3	.....
....	....	...	....	78 8	—1 5	172.0	—1 9	68 4	pl1 6	62 4	—0 6	67 8	.....
80 4	—1 9	81 0	—1.8	78 0	-3 2	74 5	—1.9	71 8	—0 7	65 1	—0 7	73 5	—0 9
82 0	....	81.3	....	76.9	...	71 6	....	62.7	....	56 1	.....	73.4	.....
81.6	....	80 5	....	65 5	....	70 0	....	57 0	...	52 0	.....	67 2	.....
82 6	...	81 4	....	76 9	....	70 2	....	61 5	....	55 7	.....	70 1	.....
82 8	....	79 7	....	75 8	....	68 7	....	60 5	....	.....	.....	68 9	.....
82 0	pl1 0	80 2	pl0 0	77 9	pl1 1	70 8	pl3 3	60 1	pl2 3	54 0	pl1.7	67 7	pl0 7
83 0	pl1 5	80.1	pl0 3	77 0	pl1 4	69 6	pl4 5	57 5	pl2 4	51 2	pl1 4	66 5	pl1.1
82 7	pl1 9	80 2	0 2	77 8	pl0 3	72 3	pl3 1	62 5	pl3 3	56 2	pl1 7	68 6	pl3 4
....	....	....	....	....	....	70 0	....	64 8	....	55 6	pl1 5	.....	.....
....	....	....	....	72.9	....	....	....	....	....	.....	.....	.....	.....
81 6	pl1 7	79 8	pl0 9	75 6	—0 4	69 9	pl3 0	61 8	pl3 2	54 5	—0 4	67 9	pl0 9
....	....	81 0	....	77 0	....	70 3	....	59 4	....	52 8	.....	.....	.....

Letters indicate days missing during month. pl means plus.

MONTHLY MAXIMUM TEMPERATURE FOR THE YEAR 1897, WITH DATES.

STATIONS.	Jan.		Feb.		March.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.	
	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.
NORTHERN SECTION.																								
Amelia	71	†	82	22	86	22	81	†	86	14	96	15	99	1	94	2	89	18	84	7	80	9	...	...
Archer	78	†	90	21	94	15	92	27	94	†	98	25	99	2	97	2	93	†	90	†	82	†	85	4
Emerson	78	†	84	†	92	22	90	8	99	22	99	†	98	30	...	...	...	...	...	...	...	...	...	...
Federal Point	76	3	86	22	89	22	87	28	91	29	97	†	96	1	96	2	91	†	88	12	83	9	79	†
Huntington	78	3	86	†	89	†	91	28	95	†	100	29	99	†	98	2	89	2	89	12	83	1	81	4
Jacksonville	76	4	84	22	88	20	88	28	93	29	99	28	99	1	99	2	94	18	89	12	83	16	80	4
Lake City	75	3	83	22	90	15	93	27	99	22	101	1	96	1	100	2	91	3	89	8	81	11	82	4
Lake Butler	76	†	83	23	88	†	90	28	90	†	99	†	98	†	...	...	95	†	95	†	86	18	82	†
Macclenny	76	†	85	23	89	*	92	†	98	22	102	†	102	†	104	2	95	†	91	8	86	7	81	4
Orange Park	78	24	84	†	93	22	89	6	92	†	99	30	97	1	97	25	91	6	85	†	81	9	78	†
Savannah	71	4	81	23	86	20	85	6	94	29	100	15	102	1	98	1	92	17	88	7	80	6	77	11
St. Augustine	75	4	85	24	86	†	82	29	87	14	96	14	99	1	95	2	91	19	85	7	84	1	78	21
CENTRAL SECTION.																								
Bartow	80	3	88	23	90	†	89	27	93	†	97	24	97	2	98	19	95	3	92	12	85	†	85	†
Brooksville	77	†	84	23	89	†	89	8	93	22	96	29	94	†	94	2	91	†	86	14	81	1	81	4
Clermont	84	2	88	23	92	15	94	25	96	28	101	29	99	28	98	3	97	3	93	12	87	1	85	4
Earnestville	79	†	88	†	92	22	94	28	96	23	99	†	97	†	96	19	94	2	89	12	84	1	82	†
Eustis	79	3	88	22	92	15	89	27	95	†	96	†	95	†	98	19	93	†	91	12	85	1	84	4
Ft. Meade	78	†	85	23	90	17	88	27	92	23	94	†	93	31	94	19	92	3	91	12	87	1	86	3
Gainesville	....	....	....	....	90	16	90	29	96	24	102	25	101	3	99	3	92	†	87	14	81	12	81	5
Grasmere	78	†	87	23	88	†	90	28	97	29	99	18	99	2	96	†	91	6	88	13	85	1	80	†

Kissimmee	86	4	92	19	94	22	94	8	94	22	.	....	98	4	97	17	94	†	93	12	87	†	85	22
Merritt's Island	77	21	86	23	88	14	86	27	92	22	94	†	95	2	94	22	91	2	86	13	82	11	80	22
Minneola Park	81	†	89	†	92	†	91	27	96	23	99	19	58	4	95	†	95	17	90	11	88	1	86	†
Mullett Key	72	3	78	24	81	†	82	6	88	†	93	†	94	3	93	14	89	2	84	†	79	†	78	†
New Smyrna	76	†	87	23	90	22	84	†	90	†	99	14	95	†	94	17	88	19	86	†	82	11	82	4
Ocala	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	90	12	83	16	84	4
Orange City	77	†	86	†	90	15	91	8	95	25	100	23	99	18	98	†	95	2	90	†	83	†	84	4
Orlando	76	18	86	23	88	15	84	27	91	25	95	24	94	2	93	†	90	†	89	12	79	†	79	3
Plant City	81	†	88	†	92	22	91	27	95	23	98	29	95	†	95	†	96	†	88	†	86	1	86	3
St. Francis	79	4	87	23	90	14	90	8	94	22	98	18	97	1	98	2	94	18	90	12	85	1	84	4
Sebastian	....	....	....	....	....	....	....	....	....	....	97	26	95	†	96	11	91	3	89	12	87	†	85	12
Tampa	78	1	82	19	88	16	86	27	90	26	94	19	94	21	94	15	90	†	88	12	82	16	82	3
Tarpon Springs	79	20	86	22	91	†	88	†	86	†	91	†	96	18	97	†	96	†	89	†	85	1	82	4
SOUTHERN SECTION.																								
Boca Raton	....	....	....	....	84	24	85	8	87	23	91	†	91	†	91	†	88	3	88	14	83	†	85	1
Jupiter	80	21	86	25	88	23	83	16	87	31	93	21	91	2	93	12	87	19	84	12	85	1	83	21
Key West	79	21	82	23	84	20	84	9	86	14	90	15	91	4	91	15	88	†	86	10	83	†	83	3
Lemon City	80	†	88	26	90	24	89	16	90	22	93	†	91	1	92	†	90	1	87	13	85	1	91	9
Manatee	80	1	85	23	90	†	90	†	94	†	....	....	98	27	95	20	91	†	87	†	84	†	84	3
Myers	78	†	84	†	87	15	90	28	92	26	93	†	92	4	92	18	90	18	87	2	84	†	82	†
WESTERN SECTION.																								
Carrabelle	....	....	....	....	....	....	....	..	....	....	96	25	96	4	95	4	93	3	86	14	77	9	74	4
DeFuniak Springs	75	2	82	19	82	†	88	27	92		102	19	96	†	99	3	95	3	90	13	81	6	75	18
Haywood	....	....	....	....	85	13	90	†	....	....	....	....	96	†	96	†	94	3	88	10	78	†	79	5
Mobile	96	17	76	22	79	20	82	27	87	22	98	19	96	31	101	3	95	3	90	8	80	16	74	3
Montgomery	74	3	80	22	84	20	88	27	91	†	100	23	96	1	102	3	96	2	92	6	80	7	74	20
Pensacola	73	17	74	20	77	13	85	20	86	22	98	21	94	31	97	3	94	16	90	3	78	11	76	3
Perry	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	91	13	89	†	81	10
Quincy	....	....	81	22	83	15	86	27	91	†	....	....	....	....	....	....	92	3	....	....	....	....	....	....
Tallahassee	73	1	78	†	83	15	84	28	92	28	97	†	97	1	93	2	91	18	87	7	78	11	75	4
Wausau	....	....	....	....	....	....	....	....	....		....	....	....	....	91	28	98	3	90	1	82	†	78	4

† More than one date.

MONTHLY MINIMUM TEMPERATURE FOR THE YEAR 1897, WITH DATES.

STATIONS.	Jan.		Feb.		March.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.	
	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.
SOUTHERN SECTION.																								
Amelia	23	28	35	28	46	27	47	11	55	†	69	†	64	14	71	†	49	22	50	30	45	14	...	...
Archer	22	†	33	28	44	27	40	10	50	†	64	4	62	15	66	27	48	†	45	26	38	13	31	8
Emerson	18	29	28	28	40	25	36	11	47	3	58	4	68	†	...	...	...	..	..	..	...	..	...	...
Federal Point	24	†	36	4	45	27	45	12	51	3	66	†	63	15	66	28	51	22	51	25	47	13	35	†
Huntington	26	28	36	4	48	27	46	11	57	†	65	1	68	15	69	27	52	22	54	25	51	4	38	30
Jacksonville	21	28	34	28	48	1	44	11	53	2	68	20	68	15	68	20	49	21	54	25	46	13	36	28
Lake City	20	28	33	28	45	25	42	11	53	2	71	†	66	14	72	†	50	23	53	†	44	13	34	28
Lake Butler	21	28	31	3	48	†	52	27	54	6	58	3	67	2	...	...	47	22	48	30	.	...	32	28
Macclenny	21	†	33	28	42	†	42	10	51	1	61	7	64	†	68	31	49	22	44	29	41	12	32	27
Orange Park	22	†	36	10	47	1	40	12	51	1	67	†	65	†	68	27	47	23	50	†	42	13	32	7
Savannah	17	28	32	28	40	28	45	11	51	2	61	8	67	14	68	†	46	†	52	30	40	24	36	26
St. Augustine	22	28	37	28	39	1	45	10	50	5	69	7	68	14	69	27	51	22	50	5	48	12	36	31
CENTRAL SECTION.																								
Bartow	28	10	37	4	41	27	47	12	51	3	65	9	70	†	68	28	53	22	48	†	45	4	31	30
Brooksville	24	28	37	†	46	27	45	†	59	5	61	1	70	†	70	†	50	22	54	†	48	†	38	†
Clermont	26	28	39	3	48	27	48	11	56	2	68	†	70	†	70	24	52	21	55	24	52	3	43	†
Earnestville	25	28	36	28	41	1	43	11	52	3	66	†	70	†	70	27	50	22	54	25	47	13	38	6
Eustis	25	†	36	28	43	1	40	24	56	†	67	10	69	17	70	27	52	22	54	†	46	13	38	†
Fort Meade	26	†	33	27	36	26	44	11	47	2	65	8	64	16	66	27	53	21	46	30	44	3	35	6
Gainesville	....	....	....	.....	45	1	42	11	52	2	69	†	60	15	70	†	48	22	51	25	46	3	36	7
Grasmere	25	28	37	....	47	47	47	†	52	3	67	†	68	†	70	†	50	22	52	27	48	†	35	30

Kissimmee	27	†	36	†	48	25	48	12	48	5	65	10	68	18	69	28	54	22	54	25	49	4	37	†
Merritt's Island	29	28	44	3	52	1	52	11	60	3	70	9	74	14	71	27	56	22	60	25	56	3	47	6
Minneota Park	30	29	39	3	45	27	52	†	49	3	66	10	68	15	69	28	55	22	53	27	49	4	41	30
Mullett Key	32	†	45	†	56	1	54	†	66	†	74	†	75	21	73	7	62	21	64	24	59	†	46	31
New Smyrna	26	†	36	4	40	27	45	12	48	3	66	†	66	15	6[illegible]	27	52	22	53	26	49	3	35	30
Ocala																			50	25	46	†	32	7
Orange City	25	28	37	7	45	27	49	11	55	3	68	11	69	17	70	30	55	22	49	20	48	23	32	30
Orlando	25	27	38	3	48	26	46	10	55	2	65	†	68	16	69	†	52	21	52	30	48	3	36	†
Plant City	27	†	38	28	40	27	46	12	50	3	66	9	66	15	66	28	51	22	50	†	45	†	32	30
St. Francis	20	29	31	4	37	27	39	12	50	†	62	†	61	†	67	14	50	22	49	30	45	13	32	30
Sebastian											68	†	70	14	71	26	54	21	54	25	54	2	42	31
Tampa	29	29	39	28	50	1	47	11	55	3	68	10	70	17	70	†	54	22	56	31	50	13	40	6
Tarpon Springs	28	29	36	28	46	27	45	12	54	3	66	1	69	15	67	31	52	22	51	25	45	†	33	30
SOUTHERN SECTION.																								
Boca Raton					50	26	55	9	59	3	70	1	69	14	71	4	64	23	59	†	57	3	49	29
Jupiter	34	29	46	3	49	27	59	11	57	3	71	†	69	5	71	4	61	22	59	25	58	3	49	29
Key West	51	29	58	4	65	28	66	17	70	8	70	8	70	7	71	23	69	8	70	19	67	1	51	28
Lemon City	38	29	45	4	48	23	58	12			72	†			73	28	65	23	58	26	58	†	52	31
Manatee	26	29	34	4	42	27	49	11	47	3					65	7	57	†	52	26	48	5	34	30
Myers	33	29	41	4	45	27	53	12	52	3	68	10	70	†	70	28	61	22	57	†	54	4	43	30
WESTERN SECTION.																								
Carrabelle											71	30	62	14	67	17	52	22	52	31	41	30	36	6
DeFuniak Springs	17	27	27	27	38	24	38	10	43	1	66	7	62	13	66	†	46	21	44	25	39	†	28	5
Haywood	17	28	38	24	38	1	37	11					64	9	68	25	52	22	46	26	42	30	33	28
Mobile	18	28	32	28	41	1	45	16	52	2	65	9	65	14	69	19	54	23	49	26	37	30	29	5
Montgomery	14	28	27	28	37	1	42	11	47	2	63	7	63	14	65	25	53	22	46	30	32	30	31	1
Pensacola	17	28	32	28	43	1	46	10	51	2	69	6	69	14	70	15	57	22	50	30	41	30	32	5
Perry																	46	22	42	†	36	1[illegible]	28	†
Quincy			34	27	39	25	53	10									49	22						
Tallahassee	19	28	30	28	42	1	40	11	47	2	65	16	62	14	68	†	50	22	50	26	45	†	34	6
Wausau															65	25	48	23	40	†	36	4	28	6

† More than one date.

STATIONS.	January.		February.		March.		April.		May.		June.	
	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.
NORTHE.N SEC.												
Amelia	2.32	.....	7.82	.....	2.98	.....	4.16	.....	0.89	.....	3.00	.....
Archer	2.05	—0.89	8.78	—0.14	0.79	—3.21	5.24	—2.81	0.53	—3.97	4.17	—4.30
Federal Point	3 63	.....	5.55	.....	1.31	.....	5.13	.....	1.39	.....	4.44	.....
Huntington	1 66	.....	4.17	.....	0.52	.....	4.82	.....	2.38	.....	7.06	.....
Jacksonville	1 89	—1.38	7.10	+3.97	1.60	—1 83	5.18	+2.31	1.35	—2 65	5.01	—0.44
Jasper	..	.....	....	.....	.....	.....	....	.. ..	.....	.....	.....	.....
Lake Butler	1 49	.....	9.77	.....	2.89	.....	7.04	.....	2.81	....	6 67	.....
Lake City	1 27	—2.16	12 79	+8.75	3.09	—2.50	5.00	—1.87	0.66	—3.43	7.42	+0.82
Macclenny	1 28	.....	11.06	.....	2.47	.....	4.51	.....	1.20	.....	7.53	.....
Orange Park	1 73	.....	1.00	.....	2.29	... ..	3.74	.. ..	1.55	.....	3.33	.....
Savannah	1 40	—1.78	8.85	+5.77	4.16	+0.38	3.35	—0.12	1.10	—1.82	3 94	—2.67
St. Augustine	1 57	—1.40	6 16	+3.26	1.26	—1.65	6.65	+2.25	1.43	—3.44	5.45	+0.53
Switzerland	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.46	.....
CENTRAL SEC.												
Bartow	1.15	.....	3.31	.....	0.46	.....	4.07	.....	1.80	.....	7.47	.....
Brooksville	1 67	.....	4.67	. ..	0.92	.....	1.90	.....	0.90	.....	8.32	.....
Clermont	1 52	.....	5.49	.....	0.45	.....	2.01	.....	0.85	.....	4.05	.....
Earnestville	1 60	.....	6.92	.....	1.04	.....	3.68	. ....	3.10	.....	6.47	.....
Emerson	0 79	.....	9.10	.....	1.29	.....	4.37	.....	0.93	.....	4.06	.....
Eustis	2 53	—1.46	7.30	+5.22	1.34	—1.45	1.52	—0.25	1.84	—0.31	6.33	+0.11
Fort Meade	2.31	—0.37	2.59	+0.68	0.59	—1.19	3.57	+1.99	5.50	+1.78	6.02	+2.31
Gainesville	....	.....	.....	.....	0.96	.....	4.89	.....	2.18	... ..	4.41	.....
Grasmere	1 48	.....	4.56	.....	3.29	.....	I.58	.....	3.30	.....	3.72	.....
Kissimmee	0 18	—2.86	6.82	+3.31	0.28	—1.16	2.75	+0.20	4.26	+1.02	5.44	—0.99
Merritt's Isl'd	1 67	+1.51	2.34	—0.30	2.45	—0.01	3. 8	—0.31	1.16	—2.53	6.84	—0.52
Minneota P'k	1 26	.....	3.52	.....	0.39	.....	2.17	.....	2.07	.....	4.89	.....
Mullet Key	2 12	.....	3.89	.....	0.98	.....	2.39	.....	0.27	.....	2.62	.....
New Smyrna	2 19	+0.03	4.24	+3.09	0.32	—2.65	1.30	—0.16	3.84	+1.63	3.81	—2.48
Ocala	2 11	+0.42	5.12	+2.97	1.05	—1.28	3.96	p13.64	0.82	—3.70	5.72	—2.54
Orange City	1 58	—0.21	4.57	+2.93	0.76	—1.80	1.47	—0.83	2.40	—0.46	7.19	+2.36
Orlando	1 16	—1.76	3.99	p12.58	0.38	— .39	2.33	+1.96	1.25	—2.54	6.53	—0.51
Oxford	2 09	.....	3.60	.....	.....	.....	2.84	.....	0.50	.....	2.62	.....
Plant City	0 87	.....	5.40	.....	1.61	.....	4.14	.....	2.63	.....	5.18	.....
St. Francis	2 04	.....	6.06	.....	0.93	.....	2.09	.....	1.65	.....	4.77	.....
Sebastian	.....	.....	.....	.....	.....	.....	.....	.....	k2 83	.....	h9 35	.....
Tampa	1 42	—1.16	5.40	+2.58	1.44	—1.24	4.65	+2.50	0.33	—2.50	8.46	—1.20
Tarpon Spr'gs	1 33	—2.77	2.13	—0.04	1.23	— 3.52	2.22	+0.37	0.32	—3.14	3.16	—8.70
SOUTHERN SEC.												
Boca Raton	....	.....	....	.....	0.13	.....	6.95	.....	11.00	.....	2.25	.....
Jupiter	5 20	+1.76	5.14	+2 56	3.65	+1.42	8.47	+6.05	10.73	+4.90	4.67	—1.94

July.		August.		September		October.		November		December		Annual.	
Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.
4.65	.....	6 75	.....	20.88	.....	7,64	.....	1.69	.....	.....	.....	.....	.....
7.95	—0.29	7.30	+0.09	8.78	pl2.05	4.29	—1.70	1.18	—2.52	5.07	—2.53	50.03	—7.26
7.05	.....	5.29	.....	7.30	.....	7.28	.....	2.39	.....	3.71	.....	64.47	.....
8.56	.....	6.85	.....	12.29	.....	4.42	.....	1.78	.....	2.69	.....	57.15	.....
3.67	—2.81	6.27	—0.22	16.23	+7.80	6.00	+0.81	1.56	—0.96	4.83	pl1.98	60.70	pl6.57
.....	.....	.....	.. ..	....	.....	....	.....	....	.....	....	.....	....	.....
3.23	.....	.....	.....	6.36	.....	4.02	.....	1.15	.....	1.98	.....	....	.....
2 69	—4.71	6.58	—0.07	6 43	—0.86	3 84	+1.25	0.93	—3.40	4.10	pl0.66	54.80	pl6.27
6.49	.....	12 11	.....	9 35	.....	5 26	.....	1.40	.....	3.25	.....	65 91	.....
5 18	.....	3 59	.....	12.70	.....	..	.....	0 66	.....	3 54	.....	....	.....
8 10	+2.29	6.73	—1.01	6 52	+0.40	6.87	+3.25	0 71	—1.57	2 26	—0.95	54.08	pl2.17
3 05	—2 02	5 18	+0.15	12 97	+5 52	7 50	pl3 43	1 40	—1 92	2 50	pl0 04	65 91	pl6 30
9 07	.....	6 45	.....	13 79	.....	6 97	.....	1 73	.....	3 68	.....	....	.....
14.55	.....	7.40	.....	11.94	.....	2.66	.....	1.16	.....	2.62	.....	58.59	.. ..
11 98	.....	9 16	.....	7 97	.....	4 62	.....	1 18	.....	2 08	.....	55 27	.....
7 82	.....	7 44	.....	8 48	.....	5 40	.....	1 18	.....	2 52	.....	47 21	.....
11 33	.....	8 08	....	10 02	.....	3 35	.....	1 07	.....	2 89	.....	59 55	.....
5 49	.....	8 49	.....	....	.....	....	.....	....	.....	....	.....	....	.....
6 21	pl2.09	7 36	pl2.18	12.72	pl3.75	5.43	pl2.00	1.22	pl0.74	1.72	pl1.16	55 52	—11.30
11 81	pl4 28	8 40	pl1 12	16 36	pl8 30	2 38	—0 47	0 97	—0 26	1 68	—0 51	51 28	pl5 94
7.18	.....	5 99	.....	7 99	.....	4 31	.....	1 08	.....	3 35	.....	....	.....
7 28	.....	3 72	.....	10 96	. ...	4 20	.....	1 31	.....	2 55	.....	47.95	.....
5.70	pl 14	4 63	—3 13	15 20	pl5.23	3 00	—0.61	0.50	—2.24	2 94	—1.22	5I 70	pl0.05
2 59	—3.17	1 91	pl1 17	17 97	pl9 61	10 81	pl5 34	5 99	pl3 55	2 18	—0 19	59 09	pl5 99
8 94	.....	6 23	.....	10 01	.....	2 34	.....	0 50	.....	1.10	.....	43 39	.....
7 67	.....	4 60	.....	8 69	.....	4 01	.....	1 03	.....	2 03	.....	40 30	.....
9 94	pl4.86	2 17	—1.31	17 03	pl11.5	4 20	pl1.88	5 17	—0.10	2 19	pl0.63	56 40	pl4.74
7.03	pl2 39	6 90	pl1 63	9 83	pl2 95	3 55	pl0 60	0 53	—1 44	3 08	pl1 07	49 70	—1 50
2 89	pl7 50	5 30	—0 22	14 08	pl5 53	5 26	pl0 27	3 66	pl2 05	2 21	pl0 00	51 32	pl8 78
9 26	pl5 13	4 32	—3 35	15 77	pl8 29	3 55	pl2 58	1 91	—1 03	2 62	pl1 13	53 57	.....
9 80	.....	6 70	.....	14 00	.....	4 10	.....	1 72	....	1 20	.....	48 58	.....
10 85	.....	7 86	.....	8 48	.....	3 97	.. ...	1 26	....	2 24	.....	54 49	.....
6 36	. ..	8 61	.....	12 87	.. ..	4 77	.....	1 98	.....	1.86	.....	53 99	.....
b3 75	.....	3 11	.....	23 01	.....	10 26	.....	2.63	.....	2 27	.....	....	.....
6 23	—1.67	7 84	—0.58	10 73	pl1.95	4 78	pl1.64	0 63	—1.63	2 50	pl0 78	54.41	—0.53
10 55	—2 13	7 87	—2 34	9 15	pl6 10	2 54	—0 51	1 50	—0 87	2 48	—1 31	44 48	—25 81
7.58	.....	4.47	.....	15.97	.....	10.01	.....	1.35	.....	1.74	.....	.....	.....
5 89	pl1.15	6 85	pl1.75	18.09	pl8.38	9 93	pl0.72	6 49	pl3.08	1 96	—0.70	87.07	pl29.09

STATIONS.	January.		February.		March		April.		May.		June.	
	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.
Key West....	3.90	+1.81	1.06	—0.57	0.38	—0.8	4.45	+3.14	4.38	+1.22	2.10	—1.90
Lemon City..	4 70	+1.94	1.90	—1.25	0.75	—3.05	10.55	pl6.80	7.20	pl0.13	5.31	pl1.75
Manatee.....	3 05	pl0.25	2.97	pl0.01	1.15	—2.28	4.13	pl2.57	1.16	pl2.22	.....	.....
Myers.....	2.26	—1.06	3.48	—0.56	1.09	—2.64	7.26	pl4.71	2:50	pl0.41	5.80	pl6.22
WESTERN SEC.												
Carrabelle....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.60	.....
DeFuni'k Sp's	2.10	.....	12.25	.....	7.82	.....	4.50	.....	1.25	.....	7.00	.....
Haywood.....	....	.....	7.83	.....	6.94	.....	6.99	.....	.....	.....	3 50	.....
Milton.....	2 14	.....	13.23	.....	6.78	.....	8.25	.....	1.13	.....	2.34	.....
Mobile.....	2 97	—2.14	7.70	pl2.99	7.43	—0.14	5.73	pl1.02	3.54	—0.80	4.09	—1.81
Montgomery..	3 26	—2.11	5.54	pl0.31	12.02	pl5.55	6.30	pl1.50	0.68	—3.37	3.79	—0.88
Pensacola....	0 74	—3.94	f 0.26	pl6.36	5.31	—0 15	3.08	—0.40	1.26	—2.07	2.03	—3.33
Perry.....	....	....	..	....	....	....	....	....	....	....	....	....
Quincy.....	....	....	12.40	....	6.70	....	d7 66	....	2.98	....	4.01	....
Tallahassee...	1 42	—2.71	10.45	pl6.37	8.84	pl3.45	9.29	pl6 53	0.43	—5.31	2.64	—5.65
Wausau.....	....	....	...	....	....	.....	...	....	....	....	...	....

pl. means plus.

YEAR 1897. WITH DEPARTURES FROM THE NORMAL.—Continued.

July.		August.		September		October.		November		December		Annual.	
Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.
3.98	p10.14	6.55	p11.78	9.11	p1.68	7.08	p'1.83	1.40	—0.87	2.07	p10.45	46.46	p18.00
....	.....	2 20	—6 44	20 35	p19 21	7 35	—1 68	1 15	—0 33	1 00	—1 68	....	.....
11 74	p11 18	5 33	—2 51	9 59	p12 15	0 50	p12 16	2 00	p10 21	2 60	p13 46	...	.....
14 82	p15 76	5 65	p12 20	10 45	p12 85	2 07	—0 64	0 73	—0 01	1 06	—0 94	57 17	—0.94
7.10	.....	5.90	.....	10.60	.....	1.10	.....	T	.....	6.50	.....	....	.....
3 96	.....	12 41	.....	1 94	.....	2 25	.....	2 02	.....	3 15	.....	60.65	.....
8 30	.....	9 33	.....	2 26	.....	0 71	.....	2 34	.....	3 88	.....	....	.....
3 95	.....	10 99	.....	2 43	.....	3 96	.....	4 88	.....	....	.....	....	.....
7 75	p11.22	11 56	p14.66	2 12	—3.03	2 12	—1.29	3 20	—0.62	4.97	p10.51	63.18	p10.57
1 40	—3 13	6 49	p12 36	1 06	—1 89	0 55	—1 81	1 69	—1 70	3 37	—1 30	46 25	—5 97
2 19	—4 54	5 67	—2 69	2 35	—2 45	1 33	—2 00	3 61	— .16	2 86	—1 03	40 69	—16 40
.....	.....	1 11	.....	4 35	....	1 92	....	2 75	....	4 24	....	....	.....
....	....	....	....	....	....	....	....	....	....	....	....	....	.....
6.13	—3.47	7.29	p12.00	3.98	—5.03	2.57	p10.06	1.02	—2.75	5 27	p11.56	59.33	—0.76
....	.....	9 50	....	2 13	.....	0 25	....	1 88	....	2 28	....	....	.....

VOLUNTEER OBSERVERS.

Station.	Observer.
Amelia	Mrs W Allen.
Archer	W C Andruss.
Bartow	J S Wade.
Boca Raton	J M Richards.
Brooksville	Col F L Robertson.
Carrabelle	A P Pennell.
Clermont	W M Kern.
DeFuniak Springs	J T Stubbs.
Emerson	W J Clarke.
Earnestville	L B Dobell.
Estoro	O F L'Amorreaux.
Eustis	H W O Margary.
Federal Point	Chas Ingalls.
Fort Meade	Chas Stansfield.
Gainesville	Jas Bell.
Grasmere	J B Escott.
Haywood	D L Burke.
Huntington	B N Bradt.
JACKSONVILLE	SECTION CENTER.
Jasper	Prof W A Little.
Jupiter	U S Weather Bureau.
Key West	" " "
Kissimmee	D C Lee.
Lake Butler	John A King.
Lake City	Col W B Knight.
Lemon City	E L White.
Macclenny	H L White.
Manatee	C V S Wilson.
Merritts' Island	Rev James White.
Milton	John Carlovitz.
Minneota Park	F W Porter.
Myers	Miss M M Gardner.
Mobile	U S Weather Bureau.
Montgomery	" " "
Mullet Key	Dr D Echemendia.
Nassau, N. P.	J A Kerr.
New Smyrna	C Westall.
Oak Hill	E S Coutant.
Ocala	W L Jewett.
Old Town	O Y Felton.
Orange City	S M Morse.
Orange Park	E R Latham.
Orlando	E A Richards.
Oxford	W A Sparkman.
Pensacola	U S Weather Bureau.
Perry	T W Lundy.
Plant City	Wiley Stinson.
Quincy	Wm Corry.
Savannah	U S Weather Bureau.
St. Augustine	Capt J F Ives, U S A.
St. Andrews' Bay	W A Emmons.
St. Francis	Dr John C Peyton.
Sebastian	S Kitching.

VOLUNTEER OBSERVER—Continued.

Station.	Observer.
Switzerland	W C Steele.
Tallahassee	Rev W A Carter.
Tampa	U S Weather Bureau.
Tarpon Springs	C D Webster.
Wausau	John B Glen

ANNUAL SUMMARY FOR THE YEAR 1898.

ATMOSPHERIC PRESSURE IN INCHES AND HUNDREDTHS.

The average atmospheric pressure for the year was 30.09 inches. The highest monthly mean pressure for the State was 30.17 inches in January; the lowest monthly mean pressure was 30.01 inches in September. The highest barometer reading during the year was 30.60 inches at Pensacola on January 2d; lowest, 29.09 inches, at Jacksonville on October 2d; annual range for the State, 1.51 inches.

AIR TEMPERATURE.

The annual mean temperature for the State was 70.5 degrees, which is slightly below the normal. The highest monthly mean temperature was 83.8 degrees at Clermont in June and July. The lowest monthly mean temperature was 51.4 degrees at DeFuniak Springs in February. The highest absolute temperature, 102 degrees, occurred at Lakemont on May 28th; Clermont, June 11th and 12th and July 18th, and McClenny on July 20th. The lowest temperature, 17 degrees, occurred at Archer and Wausau on January 3d; range for the State, 85 degrees. The coldest months were February and December, with an average temperature of 57.5 degrees; the warmest was July, with a mean of 81.6 degrees. The annual thermal data by sections were: Northern, 69.0 degrees; Central, 71.5; Southern, 73.6, and Western, 67.7 degrees.

PRECIPITATION.

The precipitation averaged for the State 48.36 inches, which is about 4 inches below the normal. Compared with 1897, we find that 8 inches less rain fell during the current year. The greatest average monthly amount was 12.96 inches in August; the least average monthly amount was 0.74 inch in January. The greatest monthly total, 31.26 inches, fell at St. Andrew's Bay in August; the least monthly sum was 0.00 at Lemon City in January. The greatest yearly total was 77.02 at St. Andrew's Bay, and the least was 33.44 inches at Merritt's Island. Annual rainfall by sections was: Northern, 49.51 inches; Central, 45.01; Southern, 46.81, and Western, 64.56 inches.

WIND AND WEATHER.

The prevailing wind direction during 1898 was northeast. The maximum wind velocity recorded at Weather Bureau

stations was 60 miles per hour from the west at Jacksonville on October 2d.

MISCELLANEOUS.

Thunder storms were less frequent and not so severe as during 1897. Reports of fogs were rare, and no severe hail storms occurred.

Killing frosts occurred over Western, Northern, and sections of Central and Southern districts during January and February. The first killing frost of autumn was reported during November.

ANNUAL AVERAGE TEMPERATURE AND PRECIPITATION

During the past seven years, deduced from Weather Bureau and voluntary meteorological stations:

Year.	Mean Temperature.	Average Rainfall. Inches and Tenths.
1892	70.4	48.0
1893	71.0	53.0
1894	71.2	52.5
1895	69.9	45.5
1896	71.0	49.6
1897	71.2	54.1
1898	70.5	48.4

CLIMATOLOGICAL DATA FOR THE YEAR 1898.

Stations.	Elevation, feet.	Temperature (deg. Fahrenheit).						Precipitation (Inches).						Number rainy days.	Sky.			Prevailing direction of wind.
		Length of record, years.	Annual mean.	Highest.	Date.	Lowest.	Date.	Length of record, years.	Total for the year.	Greatest monthly.	Month.	Least monthly.	Month.		Number clear days.	Number partly cloudy days.	Number cloudy days.	
NORTHERN SECTION.																		
Archer	92	5	70.0	100	.....	17	Jan. 3	....	55.38	18.14	July	.54	Mar.	118	126	217	22	.....
Federal Point	10	5	69.1	97	July 21	24	‡	....	50.97	13.01	July	.83	Jan.	112	130	88	116	ne
Huntington	50	1	75.5	100	July 20	25	Jan. 3	....	43.30	10.79	Aug.	.91	an.	86	204	112	49	ne w
Jacksonville	43	27	69 8	98	July 18	24	Jan. 2	....	45.71	12.03	July	.43	Jan.	135	147	167	51	ne
Jasper	165	....	58.1g	...	.....	..	.....	....	11.74	5.52	Dec.	.51	Jan.	29	52	51	17	w
Lake Butler	...	2	69.3	100	July 20	22	Jan. 2	....	60.68	19.20	Aug.	.83	Nov.	32	176	157	32	.....
Lake City	210	9	69.7	101	June 16	23	Jan. 2	....	53.15	11.96	July	.54	Jan.	115	78	161	126	sw
Macclenny	140	1	68.3a	102	July 20	22	‡	....	51.72	15.79	July	.46	Jan.	86	140	189	36	ne sw
Orange Park	25	3	70.2a	100	July 16	23	Jan. 2	....	48.83	18.01	Aug.	.38	Jan.	78	153	103	78	.....
Savannah	36	26	67.2	101	May 30	23	Jan. 2	....	60.18	22.79	Aug.	.33	Jan.	117	155	116	94	s
St. Augustine	10	46	67.7	95	June 19	25	‡	....	38.51	9.00	July	.55	Jan.	54	....	....	..	.....
Switzerland	...	....	67.2*	...	.....	25	‡	....	46.87	11.32	Aug.	.48	Jan.	117	..	....	....	.....
Entire Section	...	....	69.0	102	July 20	17	Jan. 3	....	49.51	22.79	Aug.	.36	Jan.	96	146	160	59	ne
CENTRAL SECTION.																		
Bartow	...	2	73.7a	100	July 20	18	Jan. 3	....	46.22	9 32	July	.36	Apr.	94	130	105	30	se s
Brooksville	328	5	70.5	97	June 12	23	Jan. 2	....	51.64	13.44	Aug.	.15	Mar.	99	220	121	24	w
Clermont	...	5	73.7a	102	‡	26	‡	....	39.66	13.48	Aug.	.30	Jan.	85	201	148	16	ne
Earnestville	193	3	72.3	100	‡	24	Jan. 3	....	55.88	20.16	Aug.	.47	Mar.	121	160	116	89	ne

Eustis	180	6	72.2	101	‡		25	‡	....	48.46	10.95	Aug.	.47	Apr.	119	124	128	113	ne
Ft. Meade	125	3	70.0b	97	July	21	26	‡	...	46.26	9.68	Aug.	.42	Jan.	83	208	123	34	ne
Gainesville	178	5	69.6	100	‡		20	Jan.	3	58.48	12.71	July	.83	Mar.	107	229	29	77	.....
Grasmere	175	6	71.7	101	‡		19	Jan.	3	42.00	12.20	Aug.	.41	Mar.	88	285	49	31	sw
Homeland	....	....	78.1	99	‡		..	.....	....	.....	....	...	.....	.....	...	126	79	40	se
Kissimmee	65	6	72.8	98	‡		22	Jan.	3	40.47	11.41	Aug.	.00	Mar.	73	214	114	37	se
Merritt's Island	20	12	72.7	96	May	31	28	Jan.	2	33 44	8.69	Aug.	.30	Jan.	75	256	54	55	se
Lakemont	..	....	.....	102	May	21	28	‡	....	36.66	12.32	July	.14	Feb.	105	228	115	22	ne
New Smyrna	20	6	69.8	94	‡		22	Jan.	3	38.87	11 19	Aug.	.77	Jan.	75	187	126	52	se
Oak Hill*	25	....	74.0l	...	.....		..	.....	....	.....	....	.....	.....	.....	...	21	52	50	ne
Ocala	150	7	70.9	101	July	20	19	Jan.	3	54.83	12.66	July	1.24	Mar.	100	143	145	77	ne
Orange City	50	5	71.7	99	July	18	19	Jan.	3	41.48	10.95	Aug.	.41	May	86	201	99	65	se
Orlando	98	5	71.7	98	July	18	23	‡	....	36.90	10.93	Aug.	.15	Apr.	116	242	81	42	e
Oxford*	.	5	.....	..	.....		20	Jan.	3	.....	.....	.....	.....	.....	...	.....	.....	.....	.....
Plant City	121	5	71.9	99	June	11	20	Jan.	3	47.31	15.06	Aug.	.32	Apr.	83	221	92	52	ne
St. Francis	20	2	69.4	97	‡		18	Jan.	3	40.44	9.93	Aug.	.71	Jan.	84	261	103	2	ne
Sebastian	36	....	74.2a	93	‡		24	Jan.	2	37.40	7.67	Sept.	.02	Jan.	82	.....	.....	.....	.....
Tampa	20	8	71.6	95	‡		27	Jan.	3	50.53	17.83	Aug.	.08	Mar.	...	178	143	44	ne
Tarpon Springs	20	12	71.0	94	Aug.	1	22	Jan.	3	61 20	16.05	Aug.	.18	Jan.	102	174	123	68	sw, w
Entire Section			71.5	102	‡		18	Jan.	3	.....	45.01	20.16	Aug.	.00	Mar.	93	202	116	47	ne
SOUTHERN SECTION.																			
Boca Raton	6	. ..	74.1a	90	‡		33	Jan.	3	....	43.07	15.18	Oct.	.34	Jan.	70	220	74	10	e
Estero*	16	....	74 4	...	.....		..	.....	....	.....	.....	.....	.....	.....	.....	68	135	174	56	ne
Jupiter	28	10	73.7	91	Sept.	17	31	Jan.	3	....	39.10	10.89	Oct.	.12	June	117	182	145	38	e
Key West	22	26	76.6	91	July	8	46	Jan.	3	....	43.39	16.99	Oct.	.22	Feb.	109	180	143	42	e
Lemon City	15	2	74.9	92	‡		35	Jan.	3	....	49.58	14.65	Oct.	.00	Jan.	54	159	158	48	se
Manatee	16	7	71.1	100	June	11	20	Jan.	3	....	58.53	18.48	Aug.	.15	Jan.	98	212	91	31	.....
Myers	....	13	72.6	94	July	19	28	Jan.	3	....	47.17	11.62	Aug.	.02	Feb.	93	258	82	2	s
Entire Section			73.6	100	June	11	20	Jan.	3	....	46.81	10.89	Oct.	.00	Jan.	88	183	140	42	e
WESTERN SECTION.																			
Carrabelle	12	2	71.3b	95	July	1	22	Jan.	2	....	37.30	19.90	Aug.	T	‡	23	271	0	21	sw
Crawfordville	...	....	62.9b	...	.....		..	.....	....	....	44.62	20.56	Aug.	3.95	Sept.	53	60	59	15	ne
DeFuniak Springs	193	2	65.7	99	July	1	18	Jan.	1	.....	69.89	22.98	Aug.	.31	May	112	79	224	62	.....

CLIMATOLOGICAL DATA FOR THE YEAR 1898.—Continued.

STATIONS.	Elevation, feet.	Temperature (deg. Fahrenheit).						Precipitation (Inches).						Number rainy days.	Sky.			Prevailing direction of wind.
		Length of record, years.	Annual mean.	Highest.	Date.	Lowest.	Date.	Length of record, years.	Total for the year.	Greatest monthly.	Month.	Least monthly.	Month.		Number clear days.	Number partly cloudy days.	Number cloudy days.	
Haywood	...	...	69.6e	100	July	22	20	‡	....	55.71	11.12	Aug.	1..16	Jan.	87	147	106	112	e
Live Oak	..	..	.....	...	.....	...	...	.....	....	.....	.....	.....	3.16	Sept.	..	....	...	...	.....
Mobile, Ala	35	27	66.4	97	July	21	20	Jan. 2	....	66.11	16.40	Sept.	.81	May	134	182	115	68	n
Montgomery, Ala	219	25	65.3	100	July	1	18	Jan. 2	....	39.75	7.92	Aug.	.50	May	121	154	107	104	sw, n
Pensacola	56	18	67.5	97	July	21	20	Jan. 2	....	72.20	18.58	Aug.	.04	May	127	129	146	90	ne, sw
St. Andrew's Bay	...	....	69.4b	98	‡	..	.....	.....	...	77.02	31.26	Aug.	.76	Apr.	79	216	52	36	nw
Stephensville	...	....	.	94	July	1	..	.....	....	61.35	21.90	July	.40	May	78	125	48	86	sw
Tallahassee	193	13	67.9	96	‡		22	Jan. 2	...	60.64	15.43	Aug	.87	Apr	104	184	129	52	e. s
Wausau	250	....	66.0b	99	June	13	17	Jan. 3	....	57.39	29.68	Aug.	.80	May	87	136	107	54	n
Entire Section			67.7	100	‡		17	Jan. 3	....	64.56	31.26	Aug.	.04	May	114	146	138	81	sw

* Eye observations. Means from 7 a. m., 2 p. m. and 9 p. m. ‡ More than one date. T Less than .01 inch.
Letters denote the number of months data are missing.

STATIONS.	Jan.		Feb.		Mar.		Apr.		May.		June.	
	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.
NORTH'N SECTION												
Archer	59 1	pl3.9	55.9	—4.9	66.6	pl5.0	68.8	pl1.3	77.2	pl3..3	78 6	—0.2
Federal Point	58 1	....	55 8	....	66 0	....	66 4		74 6	....	79 5	....
Huntington	60 0	....	58 6	....	67 7	....	68 0	....	67 4	....	81 2	....
JACKSONVILLE	59.2	pl6 2	55 6	—2.9	66.7	pl4.7	66 7	—2.1	76.5	pl1 5	81 4	pl1.3
Jasper	56 4	....	52 7	....	65 0	....	54.4	....	....	....	....	....
Lake Butler	58 8	....	56 4	....	70 3	....	64 5	....	76 6	....	81 8	....
Lake City	60 5	pl4.5	55 2	—5 6	67 0	pl4.6	66 4	—2.5	76 9	pl1.7	81.4	pl0.7
McClenny	58 6	....	54 6	....	66 6	....	66.1	....	75 6	....	....	....
Orange Park	57 2	....	55 0	....	64 8	....	66.6	....	76.6	....	81 4	....
Savannah	55.5	pl4 5	51 2	—3 0	64.0	pl5 0	63 6	....	75 8	pl3.1	80 4	....
St. Augustine	58 4	pl2.0	54 5	—6.2	65 6	pl4 0	65 2	—3.0	73 8	pl1.0	78 8	pl0.8
Switzerland*	55.7	....	52 5	....	65.4	....	64 9	....	74.8	....	79.0	....
CENTR'L SECTION												
Bartow	61 4	....	59.4	...	70.2	....	70.7	....	78.1	....	82.8	....
Brooksville	61 0	....	57 4	....	67.1	....	69 2	....	77 8	....	81 0	....
Clermont	....	....	61 4	....	70 8	....	70 8	....	78 8	....	83 8	....
Earnestville	62 5	....	59 6	....	70 1	....	70 8	....	79 1	....	82.6	....
Eustis	62.6	pl5.6	59.0	—5.4	69 8	pl5.5	69 8	—1.5	78 2	pl2.3	82 0	pl3.0
Fort Meade	59 0	pl0 6	59 0	—5 0	67.5	pl2 7	70.0	pl1.2	....	....	....	....
Gainesville	55 1	pl2 2	55 4	—3 2	66 4	pl5 4	66 6	—0 3	76.8	pl3 4	82 6	pl3 8
Grassmere	60.2	....	57 9	...	68 4	....	69.2	....	77 5	....	83 2	....
Homeland	....	....	....	.	....	....	68 4	....	78 2	....	83 4	pl3.8
Kissimmee	64 4	pl3.0	60 5	—1 9	68.6	pl1.7	71 2	—0 9	77 6	—0.0	82.2	pl1 8
Merritts Island	63 7	pl1 2	61 4	—4.8	69 9	pl3 5	70 2	—2 0	76.7	pl0.9	81.2	pl2 5
Lakemont	63 9	....	63.0	....	71 3	....	72 4	....	79 4	.....	83.2	....
New Smyrna	60 3	—1.3	57 8	—4.6	66 4	pl0 4	67 6	—4 6	72 2	—3.3	77 4	—3.0
Oak Hill*	....	....	....	....	....	....	....	....	....	....	....	....
Ocala	61.2	pl3.2	57 8	—5.3	68.2	pl5.9	67.6	—1 7	76 9	pl3.5	81.4	pl2 9
Orange City	60 8	pl3 3	57.4	—7 1	67 9	pl2 7	69 0	—2 0	77 7	pl3 4	83 6	pl4 8
Orlando	59 8	—0.3	59 0	—5 2	67 6	pl1 2	69.8	—1 7	77.1	pl1 6	81 7	pl3.3
Oxford*	59 0	....	56 1	....	...	...	....	....	....	..	....	....
Plant City	62 8	.....	59 1	....	69 4	....	69.0	....	75 2	....	81.2	....
St. Francis	60 1	....	57 1	....	66.3	....	65 6	....	72 5	....	77.6	....
Sebastian	64 2	....	64 0	....	70 4	...	70.6	....	74 6	....	77 6	....
Tampa	62 9	pl3.0	58 6	—4 0	69 0	pl2 0	68 9	—2 0	76.6	pl1.0	81.3	pl1.0
Tarpon Springs	59.2	—0.2	58.1	—5.9	69.4	—5.0	68.8	—2.7	75.4	-0.2	80.0	—0.2
SOUTH'N SECTION												
Boca Raton	67.3	....	65.0	....	71.8	....	72.2	....	75.4	....	79.8	....
Estero*	62 0	....	60 5	....	68.6	....	70 5	....	75 8	...	81 0	....
Jupiter	64.7	0.0	64 0	3 0	69 8	pl1.0	71.8	0.0	76 0	0 0	79 0	0.0
Key West	76.0	pl0.3	68.6	—2 8	73.3	pl0.7	75 4	pl0.8	78 0	—1.0	82 4	0.0

FOR THE YEAR 1898, WITH DEPARTURES.

July.		Aug.		Sept.		Oct.		Nov.		Dec.		Annual.	
Temperature	Departure.	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.
81.0	pl1.3	81.2	pl0.0	80.4	pl0.8	70.6	– 0.9	64.4	pl1.6	55.8	—3.2	70.0	pl0 9
80 8	....	80 6	....	78 5	....	70 2	....	63 7	....	55 1	.....	69 1	.....
82 0	....	80 8	...	79 8	....	70 6	....	65 1	....	55 7	.....	70 5	.....
82 0	–0 3	82 1	pl1 0	79 8	pl2 0	70 0	0.0	62 6	pl4 0	54.8	—0 2	69 8	pl1 2
....	....	....	....	....	...	....	....	....	....	52 8	.....	.....	.....
82 8	....	80 9	...	81.2	....	66 8	...	56.1	....	55 4	.....	69 3	.....
81 4	pl1 6	81.0	pl0 8	79 9	pl2 0	69 6	pl0 5	62 6	pl3 5	54 6	—4 4	69 7	pl1.2
82 8	....	81 8	....	80 0	....	69 2	....	62 0	....	54.0	.....	.....	.....
83 2	pl2 3	81 4	....	78 0	....	74 4	....	....	....	53 8	.....	.....	.....
81 2	—1 0	80 3	....	78 0	pl2 0	67.6	pl1.0	57 4	—1 0	51 4	—1.0	67 2	pl0 5
79 8	—0 7	79 4	—0 7	79 1	pl1 9	71 4	1 5 9	64 4	pl1 2	53 2	—5 2	67 1	—0 8
78.8	....	78 6	...	77.3	....	68 9	....	56.9	....	53:2	.....	67 2	.....
82.0	....	80.3	....	80.9	....	74.0	....	70.8	...	.....	.....	.....	.....
79.2	....	79 4	....	79 8	....	70 8	....	66 2	....	57.6	....	70 5	.....
83 8	....	80 2	....	81 0	....	72 1	....	67 3	....	50 2	.....	.....	.....
82 6	...	81 6	....	81 4	...	72 1	...	67 0	...	58 6	.....	72 3	.....
83 0	pl1.5	81 8	pl0.8	81 1	pl3.6	72 6	pl2.1	67.0	pl3.1	59 3	—1.2	72 2	pl1.6
80 7	pl1 1	80 9	—0 1	80 6	pl2 1	73 3	pl1 3	69 3	pl3 3	59 9	—0.8	.....	—0.6
83 4	pl4 6	81 8	pl3 7	79 8	pl3 6	70 2	pl1 7	63 2	pl2 2	53 4	—4.2	69 6	pl2.0
83 6	....	82 2	....	81 2	....	72 3	....	67 0	....	57 4	.....	71 7	.....
83 8	....	83 6	....	82 3	....	74 6	....	70 8	....	61 1	.....	.....	.....
83 2	pl0 2	81 1	—1 5	81 0	pl0 8	75 0	pl0 3	68 6	pl0.5	60 8	—0.8	72 8	—0 8
81 8	pl0 8	81.0	—0 2	81 3	pl1 5	75 0	—0 4	69 2	pl1 3	61 3	—2 2	72 7	pl0 1
82 5	....	....	....	82 0	....	75 8	...	....	....	63 0	.....	.....	.....
78 9	—2 2	79 0	pl0 3	77 6	pl0 7	73 2	pl0 7	67 8	pl2 0	57 8	pl4 1	69 8	—1.2
..	....	81 0	....	81 6	....	....	....	71 3	....	61 9	.....	.....	.....
82 2	pl1 4	81 0	pl0 6	80 1	pl2 5	71 4	– 0 5	65 6	pl2 2	57 5	—0.0	70 9	pl1 1
83 2	pl6 8	81 6	pl0 5	80 6	pl0 7	72 9	pl0 7	68 0	pl6 2	58 2	—2 3	71 7	pl1.9
82.8	pl1 2	81 6	pl0 2	80 5	pl1 9	73 0	—0 5	68 0	pl1 7	59 0	—3 7	71 7	pl0 9
....	....	...	....	...	....	....	....	....	....	.....	.....	.....	.....
81.3	....	81 4	....	81 0	....	73 0	....	68 6	....	60 2	.....	71 9	.....
80.0	...	79 8	....	79 1	....	70 8	....	65 0	....	57 6	.....	69 4	.....
79 0	....	79 4	....	80 4	....	74 6	...	70 6	...	61 3	.....	72 2	.....
81 0	0.0	80 8	....	80 5	pl1 0	72	0 0	68 2	pl3 2	60 0	–2 8	71 6	—0 6
80 5	—1.3	81 8	—0.5	80 5	—1 1	72.4	—0.2	68.4	pl3 4	59 1	—1 6	71 0	pl0.1
81.6	....	81 3	....	....	....	77 8	....	73 8	....	68.4	.....	.....	.....
79 8	....	79 6	....	79.5	....	75 4	....	71 3	....	63 5	.....	72 4	.....
81 0	—1 3	80 8	0.0	81 3	pl1.0	76.8	pl1.0	72.0	pl1 0	66 2	—1 0	72 7	—0 9
83 4	—1 0	82.5	—2.0	82.0	0.0	77 2	—1 0	75 6	pl1 0	70 5	0 0	76 6	—1 6

MONTHLY AND ANNUAL MEAN TEMPERATURE FOR

STATIONS.	Jan.		Feb.		March.		April.		May.		June.	
	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.
Lemon City.....	65.7	—3.0	66 0	—4.0	72.1	—0.8	72.2	—3.8	76.0	—0.9	81.0	—1.2
Manatee.....	61 0	—0 6	59 0	—4.7	66 7	pl1.4	69 0	—2 5	76 0	—0.4	80 7	0.0
Myers.....	65.4	pl2.6	63.3	—2.7	64 2	—0 7	69.7	—4.1	75.6	—2.4	80.0	pl0.6
WEST'N SECTION.												
Bluntstown.....	....	....	....	....	....	....	....	....	....	....	....	....
Carrabelle.....	56.4	....	53.4	....	65.3	...	65.3	....	74.9	....	82.0	....
Crawfordville....	....	....	..	....	....	.....	....	....	....	....	....	....
DeFuniak Sp'gs..	55.6	....	51 4	.. .	63 6	....	61 3	....	74 3	....	79 6	....
Haywood.....	56.0	....	52 5	....	66 1	....	66 0	....	78 4	....	85 2	....
Live Oak.....	....	....	....	....	....	....	....	....	....	....	....	....
Mobile	54 7	pl5.0	52 6	—2.0	62 6	pl4.0	62 5	— 0.5	74 8	pl1.1	80 2	0 0
Montgomery	52 7	pl4 4	49 2	—3 4	62 0	pl5 1	61 0	—4 4	76 1	pl3 2	81 7	pl2 0
Pensacola	56 4	pl3 8	53 2	—2 8	63 7	pl4 1	64 0	—3 7	74 8	pl1 4	81 0	pl2 0
Quincy	58.8	....	....	....	....	....	...	....	....	....	....	.....
Stephensville....	....	....	....	....	....	...	....	....	....	...	....	....
Tallahassee.....	57.2	pl5.9	53 9	—4.7	66 0	pl5.3	65 0	—2.7	76 1	pl0.1	80 8	pl2.6
Wausau.....	55.1	....	50 6	....	64 6	...	63 8	....	75 8	....	82 6	....
St. Andrews Bay.	53.1	....	53.1	....	65.8	....	65.6	....	75.6	....	82.0	...

* Mean from readings taken 7 a. m., 2 and 9 p. m.

THE YEAR 1898, WITH DEPARTURES.—Continued.

July.		Aug.		Sept.		Oct.		Nov.		Dec.		Annual.	
Temperature	Departure.	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.
82.0	—0.8	81.6	—1.7	81.8	0 0	76.7	—1.1	75.6	pl2.6	67.4	—2.0	74.9	—0 9
80 4	—1 5	80 0	—1 8	79 8	—0 5	73 1	—0 8	67 4	pl0 6	59 6	—3 4	71 1	—1 1
81 0	—1 3	80 6	—2 2	80 8	—0 4	74 9	—1 5	71 1	—1 4	63 8	—2 0	72 6	—1 8
....	....	....	....	....	....	....	....	59 8	....	.....	.....	.....	.....
82 0	....	81.0	....	80 1	....	72 5	....	....	....	.....	.....	.....	.....
....	....	....	....	73 2	....	68 0	....	50 2	....	52 3	.....	.....	.....
78 6	....	78 2	....	76 4	....	65 0	....	55 1	....	49 8	.....	65 7	.....
83 1	....	....	....	....	....	...	....	....	....	.....	.....	.....	.....
...	....	....	. ..	80 8	....	69 9	....	....	....	.....	.....	.....	.....
81 0	....	80 0	0 0	78 0	0 6	65 4	—2 0	55 6	—2 0	49 4	—1 0	66 4	—0 6
80 6	—1 0	78 8	—1 0	76 8	pl1 0	63 6	—1 0	52 8	—2 0	48 0	—1 0	65 3	—0 1
80 9	....	80 0	—1 0	79 0	pl1 0	67 4	—3 0	57 7	—2 0	51 5	—2 0	67 5	—0 1
....	....	....	....	....	....	....	....	....	....	.....	.....	.....	.....
85 6	....	83 4	....	83 8	....	70 2	....	71 2	....	.....	.....	.....	.....
80 4	—0 5	79 4	pl0 5	79 9	pl3 9	67 1	pl0 2	58 2	—0 4	51 1	—3 2	67 9	pl0 9
81 6	....	79 5	....	....	....	....	....	54 5	....	50 8	.....	.....	.....
82 2	....	80 4	....	73 2	....	63 3	....	....	....	.....	.....	.....	.....

pl means plus.

MONTHLY MAXIMUM TEMPERATURE FOR THE YEAR 1898, WITH DATES.

STATIONS.	Jan.		Feb.		March.		Apr'l.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.	
	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.
NORTHERN SECTION.																								
Archer	82	*	80	12	90	*	90	*	97	30	100	12	100	20	94	5	93	*	88	*	84	*	80	*
Federal Point	82	25	79	11	97	22	88	23	94	30	95	*	97	21	92	4	90	*	88	3	82	*	79	*
Huntington	82	*	78	*	89	22	89	*	97	25	99	14	100	20	96	12	93	*	89	3	83	*	78	20
Jacksonville	81	25	76	12	87	22	86	24	97	30	96	17	98	18	94	5	93	3	90	3	81	5	78	3
Lake City	84	25	79	11	90	19	89	30	99	*	101	16	100	1	94	*	95	1	91	*	84	5	78	*
Lake Butler	85	13	80	14	88	18	88	30	98	30	98	*	100	20	94	30	95	1	92	3	75	22	80	3
Macclenny	83	*	86	12	90	*	91	30	99	29	....	....	102	20	96	1	97	3	92	4	89	10	81	3
Orange Park	80	22	76	13	86	24	86	*	97	30	98	29	100	16	95	*	90	*	95	*	95	6	77	3
Savannah	79	11	76	18	87	20	86	19	101	30	97	12	99	21	92	1	91	4	89	6	79	10	73	20
St. Augustine	81	25	76	12	86	24	86	5	94	*	95	19	93	*	89	*	88	23	86	*	82	18	78	3
Jasper	85	11	80	11	88	*	89	30	....	....	....	....	....	....	....	....	....	....	....	....	....	....	75	3
CENTRAL SECTION.																								
Bartow	86	19	84	19	94	23	93	23	98	*	99	*	100	20	91	*	94	15	88	*	88	13	..	...
Brooksville	82	22	79	19	87	23	94	23	96	19	97	12	95	1	92	14	90	*	89	5	83	10	78	*
Clermont	85	18	83	19	91	*	93	24	99	*	102	*	102	18	97	*	95	22	90	*	86	*	82	*
Earnestville	85	*	82	19	89	*	94	23	99	*	100	*	100	20	95	1	94	*	88	*	84	*	81	31
Eustis	85	*	83	19	89	*	92	23	98	5	101	12	101	22	96	4	95	23	92	5	85	*	84	31
Ft. Meade	87	20	86	19	90	24	93	23	..	....	96	30	97	21	92	*	96	18	90	*	86	11	86	19
Gainesville	80	26	77	*	86	24	88	24	97	31	100	30	100	*	95	6	93	*	89	5	82	*	78	*
Grasmere	84	20	86	19	86	24	92	*	98	30	101	*	99	*	94	*	92	3	90	3	84	*	78	*
Homeland	....	....	....	....	....	....	91	23	97	30	99	*	99	*	97	*	94	*	90	*	85	*	81	29

Kissimmee	90	19	81	*	88	26	92	25	98	*	97	*	96	1	94	1	94	18	92	*	86	5	80	2
Merritt's Island	82	20	79	13	85	25	89	24	96	31	95	19	92	19	91	14	90	11	88	3	82	6	78	20
Lakemont	88	20	89	19	96	24	85	*	102	28	100	*	100	20	97	31	97	18	93	*	94	*	87	21
New Smyrna	82	*	77	28	88	24	92	5	94	29	94	19	92	20	90	13	90	*	87	4	84	*	80	20
Ocala	83	*	80	*	92	22	92	22	97	*	100	27	101	20	97	*	95	3	94	13	89	5	90	3
Orange City	84	*	80	*	88	*	91	30	98	30	98	*	99	18	96	4	93	23	89	14	85	*	81	31
Orlando	82	25	80	*	87	24	91	24	97	30	97	14	98	18	94	*	91	..	88	14	84	5	81	3
Plant City	86	*	85	19	90	*	91	23	96	4	99	11	98	*	95	*	94	*	92	4	88	17	84	31
St. Francis	84	20	87	12	88	*	96	23	97	30	97	20	97	*	95	4	92	2*	87	*	85	18	81	31
Sebastian	83	*	82	18	83	*	92	24	93	*	92	20	88	*	87	15	89	17	88	3	83	11	79	21
Tampa	82	21	80	19	86	26	88	22	93	20	95	28	95	20	93	17	93	19	90	4	84	5	78	3
Tarpon Springs	83	*	81	*	90	26	87	5	89	*	92	21	93	21	94	11	92	2	89	*	87	10	82	*
SOUTHERN SECTION.																								
Boca Raton	84	26	84	20	82	*	87	5	90	31	89	*	90	*	89	*	...	...	90	1	83	11	83	*
Jupiter	83	23	80	20	79	24	87	5	91	28	89	20	91	22	88	*	91	17	89	2	82	29	84	3
Key West	82	19	81	*	82	24	84	24	86	18	89	22	91	8	90	29	89	29	86	14	84	11	81	2
Lemon City	85	*	85	20	85	24	92	25	91	31	97	*	92	30	92	*	90	*	90	*	85	*	82	23
Manatee	83	*	83	*	89	*	92	1	96	4	100	11	96	1	94	12	95	3	90	*	87	5	81	20
Myers	89	24	85	19	88	22	90	*	92	18	93	29	94	19	90	*	93	18	89	13	85	10	81	*
WESTERN SECTION.																								
Carrabelle	75	13	72	15	79	*	81	*	91	30	94	24	95	1	91	15	91	4	87	*	...	..	..	..
DeFuniak Springs	77	11	77	11	84	24	86	30	97	27	98	5	99	1	95	22	94	18	90	*	81	4	76	30
Haywood	79	11	74	11	85	24	85	30	97	14	98	30	100	22	...	..	..	...	...	....	...	..	..	..
Mobile	73	25	74	15	82	24	82	13	92	30	93	30	97	21	94	22	90	1	87	3	77	5	70	21
Montgomery	79	12	74	10	86	23	85	30	96	30	98	1	100	1	93	23	92	2	90	*	78	5	74	21
Pensacola	72	11	69	15	78	22	80	20	93	26	91	30	97	21	92	2	90	18	88	2	75	3	70	3
Quincy	78	11	....	.	...	....	...	....	....	...	....	....	....	...	...	...	...	....	..	...	...	.	..	..
Tallahassee	81	11	78	9	87	25	88	15	96	*	96	30	95	*	94	*	95	*	92	6	83	3	76	30
Wausau	78	25	77	10	84	*	87	30	98	*	99	13	97	*	93	*	...	...	...	...	81	9	76	30
St. Andrew's Bay	...	...	72	*	84	26	82	20	92	*	96	4	98	21	98	3	92	*	79	25	83	5	..	..
Stephensville	....	....	....	....	....	....	....	....	....	....	....	....	94	1	93	1	91	*	86	*	91	16	..	.
Crawfordsville	....	....	....	....	....	...	....	....	....	....	....	....	....	....	....	....	92	4	96	14	79	*	79	2
Live Oak	.....	....	....	....	....	....	....	....	.....	....	...	....	..	....	....	....	95	3	85	*	....	..	..	..
Blountstown	...	.....	....	....	....	....	....	....	..	....	.....	....	....	....	....	....	..	....	..	....	77	18	76	*

* More than one date.

MONTHLY MINIMUM TEMPERATURE FOR THE YEAR 1898, WITH DATES.

STATIONS.	Jan.		Feb.		March.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.	
	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.
NORTHERN SECTION.																								
Archer	17	3	28	2	37	1	40	8	53	8	59	*	59	4	69	9	66	13	37	27	37	27	25	27
Federal Point	24	*	31	*	36	1	39	8	52	8	61	3	67	*	68	29	68	29	42	27	39	27	29	6
Huntington	25	3	34	1	43	*	44	8	53	8	64	*	68	*	67	29	69	15	42	27	40	27	32	12
Jacksonville	24	2	27	2	42	5	42	8	52	8	64	8	67	28	70	9	69	15	40	27	36	27	33	6
Lake City	23	2	24	2	37	5	36	8	48	8	59	*	62	12	69	6	65	*	39	27	34	27	27	*
Lake Butler	22	2	24	1	39	4	41	*	56	8	60	8	69	*	67	11	68	20	31	27	34	27	27	12
Macclenny	22	*	22	1	36	4	37	7	50	7	....	....	67	*	69	11	65	*	37	26	33	26	28	*
Orange Park	23	2	26	2	37	5	39	7	53	8	59	7	60	*	65	14	61	17	42	*	36	27	28	27
Savannah	23	2	23	2	37	1	42	28	48	8	65	6	63	12	69	27	64	12	39	27	31	27	31	10
St. Augustine	25	*	28	1	42	1	45	7	53	7	60	8	68	11	68	4	71	*	42	26	38	26	33	11
Jasper	16	3	21	2	34	5	34	8	....	....	....	....	....	....	..	..	..	..	..	..	..	..	28	6
Switzerland‡	25	*	29	2	42	5	44	7	57	....	....	....	....	....	..	..	..	..	..	..	..	..	..	..
CENTRAL SECTION.																								
Bartow	18	3	30	23	34	1	40	28	46	9	60	4	67	3	70	*	71	*	48	23	48	20	31	12
Brooksville	23	3	29	2	40	1	44	88	55	8	64	7	68	23	69	9	70	*	42	27	42	27	32	*
Clermont	26	*	34	1	45	1	47	*	52	7	62	5	68	21	68	*	67	13	43	26	42	26	34	11
Earnestville	24	3	28	2	43	*	44	8	53	8	63	*	69	*	70	*	70	*	44	23	43	27	32	*
Eustis	25	*	28	2	41	1	41	8	56	8	63	7	69	4	67	*	68	15	43	27	39	27	32	12
Fort Meade	26	3	27	1	34	1	40	*	45	8	60	3	67	5	67	7	69	30	45	22	44	30	29	27
Gainesville	20	3	26	2	39	5	42	*	52	*	64	7	69	*	70	*	62	13	39	27	37	27	30	12
Grasmere	19	3	29	2	40	1	44	28	47	8	61	3	70	*	68	29	70	*	46	*	42	27	30	*

Glenwood	...	....	...	....	38	6	42	7	49	7	62	2	70	6	68	29	71	†	42	27	40	27	29	12
Homeland	....	....	....	....	....	....	45	*	53	9	65	4	71	*	71	†	71	9	49	23	51	20	27	11
Kissimmee	22	3	32	*	37	1	43	9	55	11	55	3	70	25	68	28	68	†	49	26	41	29	32	11
Merritt's Island	28	2	36	2	47	5	52	14	55	9	66	7	70	9	64	12	71	25	52	27	48	29	40	†
Lakemont	28	*	32	3	39	1	45	28	53	*	63	*	63	9	..	..	69	8	50	†	48	20	32	12
New Smyrna	22	3	31	2	38	1	45	3	48	8	58	1	67	1	67	28	68	4	44	27	44	27	30	7
Ocala	19	3	28	*	37	2	39	8	48	8	60	8	68	*	67	3	67	†	39	27	39	27	26	26
Orange City	19	3	29	2	35	1	42	3	56	9	66	5	73	*	70	8	71	†	46	27	42	†	28	†
Orlando	23	*	30	1	40	1	48	8	53	11	63	3	70	*	68	29	71	†	48	27	45	†	35	†
Oxford ‡	20	3	30	2	....	....	....	....	....	....	....	....	....	....	..	..	..	..	..	..	..	..	..	...
Plant City	20	3	29	2	36	1	40	28	49	9	58	4	61	*	69	†	68	17	46	23	46	†	30	12
St. Francis	18	3	29	*	33	1	36	8	41	8	54	*	64	1	65	†	65	29	44	†	40	28	26	†
Sebastian	24	2	42	1	53	*	49	27	54	*	62	3	69	8	72	†	72	†	53	23	50	30	38	11
Tampa	27	3	31	2	46	2	48	8	58	8	64	7	68	11	70	4	69	2	47	23	43	27	36	6
Tarpon Springs	23	3	28	2	44	2	45	8	60	*	66	*	70	3	71	29	70	†	42	27	45	27	34	27
SOUTHERN SECTION.																								
Boca Raton	33	3	41	2	49	*	50	28	50	†	66	6	70	†	72	†	71	7	58	23	55	30	40	†
Estero ‡	24	3	34	2	43	1	....	....	....	....	....	....	....	....	..	..	..	..	..	..	..	..	..	..
Jupiter	31	3	40	2	47	1	51	28	53	8	67	7	69	2	71	2	72	9	55	23	56	30	41	28
Key West	46	3	54	2	60	1	65	28	69	8	70	10	72	16	69	8	69	2	64	22	67	17	55	6
Lemon City	30	3	40	2	50	1	52	16	52	9	65	6	70	†	69	9	72	17	59	23	55	30	40	12
Manatee	20	3	31	2	39	1	43	28	56	2	60	4	65	†	66	2	67	3	47	17	47	30	32	12
Myers	28	3	37	2	42	1	51	10	50	9	61	4	68	3	70	9	70	8	53	23	54	†	37	12
WESTERN SECTION.																								
Carrabelle	22	2	27	2	42	4	41	*	48	8	70	9	66	12	73	†	67	13	43	†	..	..	.	..
DeFuniak Springs	18	1	20	*	30	5	34	8	42	7	64	†	60	†	66	13	60	16	30	27	28	23	22	11
Haywood	20	*	25	2	36	5	41	*	48	7	68	3	63	13	..	..	..	..	..	..	..	..	..	..
Mobile	20	2	29	2	35	5	40	*	46	7	70	18	66	13	71	14	66	29	37	27	31	24	25	11
Montgomery	18	2	22	2	33	5	34	6	43	7	67	22	61	13	70	29	60	8	34	27	26	27	20	14
Pensacola	20	2	29	2	38	5	44	7	44	7	69	18	65	13	71	26	69	27	39	27	32	23	26	11
Quincy	23	31	....	....	....	....	....	....	....	....	....	....	....	....	..	..	..	..	..	..	..	..	..	..

* More than one date. † More than one date. ‡ Maximum readings from dry thermometer.

MONTHLY MINIMUM TEMPERATURES FOR THE YEAR 1898, WITH DATES.--Continued.

STATIONS.	Jan.		Feb.		March.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.	
	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.
Tallahassee	22	2	26	2	37	5	38	8	48	7	63	†	63	12	70	†	62	13	35	27	31	27	27	†
Wausau	17	3	21	4	32	5	34	8	47	7	67	9	63	14	69	4	...	..	..	..	30	†	25	†
Stephensville	..	...	....	...	....	..	....	..	...	....	....	....	70	11	75	†	74	8	44	31	44	27	..	..
St. Andrew's Bay	....	...	27	4	38	5	40	8	48	7	66	9	64	13	58	7	65	16	36	27	33	27	27	27
Crawfordville	....	....	.....	....	...	...	....	..	....	....	....	....	....	....	..	..	52	21	30	27	32	30	21	27
Live Oak	....	....	....	....	....	....	....	....	....	..	....	....	....	....	..	..	65	12	38	26	..	..	..	..
Blounstown	....	....	....	....	....	....	....	....	....	..	....	....	....	....	..	..	..	..	..	..	35	1	37	†

†More than one date.

STATIONS.	January.		February.		March.		April.		May.		June.	
	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.
NORTHE'N SEC.												
Archer	1.42	−1.52	3.31	+0.49	0.54	−3.46	2.38	−0.05	1.66	−2.84	2.88	−5.54
Federal Point	0.83	...	1.09	.....	1.30	.....	7.45	.....	1.17	.....	3.04	.....
Huntington	0 91	.....	1.34	.....	0.94	.....	1.33	.....	6.16	....	2.25	....
Jacksonville	0 43	−2.84	2.10	−1.03	2.04	−1.39	2.45	−0.42	1.81	−2.19	2.13	−3.32
Jasper	0.51	.....	1.35	. ..	2.51	.....	1.85	.....	....	.....	...	.....
Lake City	0.54	−3 89	4.04	−0.00	1.60	−3.99	1.94	−2.19	1.47	−2.62	2.42	−4.18
Lake Butler	0 95	.....	4.78	.....	1.48	.....	1.52	.....	1.55	.....	3.90	.....
Macclenny	1 46	.....	3.12	.....	1.49	....	1.74	.....	1.86	.....	5.57	.....
Orange Park	0 38	.....	2.18	.....	2.03	.....	3.17	.....	1.57	.....	1.35	.....
Savannah	0 36	−2.91	.56	−2.52	1.93	−1.85	2.46	−1.01	1.01	−1.91	4.58	−1.82
St. Augustine	0 55	−2.42	.68	−2 99	0.90	−1.92	4.20	+2.10	3.55	−0.85	1.10	−3.77
Switzerland	0 48	.....	2.01	....	1.88	.....	1.87	.....	1.67	.....	2.81	.....
CENTRAL SEC.												
Bartow	0 48	...	0.87	.....	0.66	.....	0.36	.....	2.58	.....	4.27	.....
Brooksville	0 61	.....	1.97	.....	0.15	.....	0 34	.....	0.68	.....	4.74	.....
Clermont	0 30	.....	0.81	.....	0.99	.....	0.49	....	1 29	.....	2.53	.....
Earnestville	0 48	....	1.18	.....	0.47	.....	0 65	.....	1.75	.....	9.07	.....
Eustis	1 08	−1.31	1.43	−0.55	0.64	−2.15	0.47	−1.30	1.92	−0.23	5.94	−0.88
Fort Meade	0 42	−1.26	0 57	−1.34	1 66	−0.80	0.57	−1.01	0.73	−2.99	8.64	+0.31
Gainesville	1 07	−2.88	3.49	+0.99	0.83	−2.77	2.85	+1 20	2.06	−0.73	3.28	−2.59
Grasmere	0 26	.....	1.13	.....	0.41	.....	0.51	.....	1.39	.....	2.62	. ...
Glenwood	....	...	....	....	...	...	. .	....	....	....	....	....
Homeland	....	....	....	....	...	...	....	....	...	...	....	....
Kissimmee	0.23	−2.81	1.12	−2.31	0.00	−1.44	0.12	−2.43	0.35	−2.89	5.75	−1.08
Merritt's Isl'd	0.30	−2.88	1.22	−1.42	0.68	−1.78	0.51	−3.08	0.73	−2.96	0.64	−5.72
Lakemont	0 16	.....	0.14	.....	1.82	.....	0.58	.....	0.69	.....	0.84	.....
New Smyrna	0 77	−1.39	1.52	+0.37	1.70	−1.27	1.19	−0.27	1.17	−1.04	2.55	−3.64
Ocala	1 44	0.25	1.38	−0.77	1.24	−1.09	2.54	+1.22	2.38	−2.14	3.50	+0.56
Orange City	0 98	−0.81	1.96	+0.32	0.61	−1.95	0.65	−1.65	0.41	−2.45	5.18	+0.25
Orlando	0 64	−2.28	1.26	+0.15	0.54	−1.21	0.15	−1.35	1.19	−2.57	1.13	−6.91
Oxford	1 00	.....	0.96	....	....	....	....	....	....	....	....	....
Plant City	0 58	...	0.47	....	0.52	....	0.32	....	0.72	....	3.08	....
St. Francis	0 71	.	1.07	....	1.19	....	1.70	....	1.60	....	3.57	...
Sebastian	0 02	....	1.09	....	1.50	....	1.45	....	1.11	....	1.05	....
Tampa	0 42	−1.89	1.51	−1.13	0.08	....	0.16	−1.77	0.37	−2.08	5.96	−3.29
Tarpon Spr'gs	0 18	−3.92	1.50	−1.67	0.26	−4.49	0.30	−1.55	0.41	−3.05	5.82	−6.04
SOUTHERN SEC.												
Boca Raton	0.34	...	1.83	....	2.71	....	1.80	....	2.46	....	0.28	....
Jupiter	0 36	−3.11	0.93	−1.72	3.20	+0.80	1.90	−1.04	1.15	−4.43	0.12	−5.97
Key West	0 34	−1.75	0.22	−1.41	0.76	−0.49	0.61	−0.60	3.20	+0.10	2.44	−1.56

YEAR 1898, WITH DEPARTURES FROM THE NORMAL.

July.		August.		September		October.		November		December		Annual.	
Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.
18.14	+9.94	9.49	+2.28	3.27	—3.46	5.39	+2.80	3.18	+0.67	3.72	+0.76	55.38	—1.91
13.01	.....	10.59	.....	2.31	.....	4.82	.....	2.21	.....	3.15	.....	50.97	.....
5.44	.....	10.79	.....	2.93	.....	6.25	.....	2.43	.....	2.53	.....	43.30	.....
12.03	+5.55	5.44	—0.99	3.46	—5.09	6.74	+1.60	2.34	—0.65	4.77	+1.76	45.71	—8.42
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.52	.....	.....	.....
11.96	+4.56	9.05	+2.40	4.04	—3.25	8.03	+5.44	2.54	—1.79	5.52	+1.48	53.15	—7.92
10.04	.....	19.20	.....	2.00	.....	5.50	.....	0.83	.....	4.93	.....	66.68	.....
15.79	.....	7.43	.....	3.65	.....	3.51	.....	1.87	.....	5.23	.....	51.72	.....
7.95	.....	18.01	.....	4.56	.....	3.24	.....	0.65	.....	3.74	.....	48.83	.....
8.53	+2.59	22.79	*14.97	5.06	—0.90	4.46	+0.79	6.28	+4.00	2.16	+1.11	60.18	+8.27
9.00	+3.03	6.10	+1.07	3.16	—4.29	3.85	—0.22	1.60	—1.62	3.82	+1.36	38.51	—10.29
9.99	.....	11.32	.....	3.50	.....	5.04	.....	2.30	.....	4.00	.....	46.87	.....
9.32	.....	8.89	.....	7.88	.....	5.44	.....	2.43	.....	3.04	.....	46.22	.....
12.48	.....	13.44	.....	7.30	.....	5.07	.....	1.90	.....	2.96	.....	51.64	.....
7.44	.....	13.48	.....	2.01	.....	5.27	.....	1.30	.....	3.75	.....	39.66	.....
6.85	.....	20.16	.....	3.38	.....	6.05	.....	1.20	.....	4.64	.....	55.88	.....
10.16	+5.95	10.95	+4.81	7.18	—1.79	4.54	+1.11	1.77	—0.10	2.38	—0.50	48.46	+4.24
7.82	+0.29	9.68	+3.00	8.30	+0.24	3.87	+0.82	2.09	+0.86	1.97	—0.22	46.26	+0.92
12.71	—6.06	18.21	+0.67	3.47	—3.06	6.27	+4.38	2.93	+0.21	3.31	p11.30	50.48	p13.36
5.35	.....	12.20	.....	3.61	.....	8.33	.....	1.82	.....	3.73	.....	42.06	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
7.90	p12.34	11.41	p13.65	4.52	—4.67	5.17	—0.27	0.88	—2.73	3.02	p10.28	40.47	—11.28
6.12	p10.36	8.69	p12.95	3.97	—4.39	5.69	p10.22	1.43	—9.01	3.46	p11.07	33.44	—19.66
12.32	.....	8.73	.....	6.49	.....	3.01	.....	1.84	.....	2.04	.....	38.66	.....
3.94	—1.24	11.10	p17.71	1.10	—4.32	8.39	p12.31	1.59	—3.68	3.67	.....	38.87	—5.79
12.66	p18.02	11.80	p16.62	4.31	—8.47	7.67	p14.72	1.63	—0.34	4.19	p12.18	54.83	p13.63
4.61	—9.49	10.95	p15.43	4.05	—4.45	7.98	p12.99	1.56	—0.05	2.54	p10.33	41.48	—1.06
7.31	p12.18	10.93	p13.26	3.45	—4.05	5.55	—0.58	1.09	—1.85	3.68	p12.19	36.90	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
8.95	.....	15.06	.....	5.97	.....	6.43	.....	1.97	.....	3.24	.....	47.31	.....
5.23	.....	9.93	.....	2.25	.....	8.35	.....	2.10	.....	2.74	.....	40.44	.....
2.91	.....	5.34	.....	7.67	.....	7.13	.....	1.55	.....	6.58	.....	37.40	.....
8.29	p10.35	17.83	p18.37	6.57	—6.15	4.56	p11.21	1.96	—0.02	2.87	p 0.52	50.53	—4.47
12.77	p10.09	16.05	p15.71	13.12	p13.87	4.57	p11.52	1.07	—1.30	5.15	p11.36	61.20	—9.09
5.84	....	9.14	....	....	....	15.18	....	0.61	....	2.80	....	....	.....
6.80	p11.44	6.62	p11.30	3.38	—6.15	10.8	p11.76	1.11	—2.28	2.56	—0.08	39.10	—18.88
2.28	—1.56	5.73	p10.96	5.33	—2.10	16.9	*11.74	2.24	—0.03	3.25	p11.63	43.39	p14.93

MONTHLY AND ANNUAL MEAN PRECIPITATION FOR THE

STATIONS.	January.		February.		March		April.		May.		June.	
	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.
Lemon City..	0.00	—2.96	2.45	—0.70	2 60	—0.45	0.60	—3.15	1.65	—5.37	0.70	—6.35
Manatee.....	0 15	—2.65	0.81	—2.15	0.37	—2.64	0.25	—1.31	2.08	—1.85	5.35	—2.94
Myers.....	0 05	—3.27	0.02	—2.90	0.46	—3.27	0.37	—2.18	3.53	pl0.62	2.83	—9.19
WESTERN SEC.												
Carrabelle....	1.90	.....	4.30	.....	1.10	.. ..	1.20	....	1.10	.....	T.	.....
Crawfordville	....	.....	.....	.....	....	.....	....	.....	....	.....	....	.....
DeFuni'k Sp's	2.00	.....	5.47	.....	2.03	.....	1.65	.....	0.31	.....	3.67	.....
Haywood.....	1 16	.....	3 50	.....	2.44	.....	3.52	.....	2.58	.....	3.11	.....
Live Oak.....	....	....	....	....	....	....	....	....	....	....	....	....
Mobile.....	2 15	—2 96	5.58	pl0.97	1.90	—5.67	2.61	—2.10	0.81	—3.53	4.86	—0.98
Montgomery..	1 52	—3.85	2.33	—3.01	2.05	—4.42	4.31	—0.49	0.50	—3.55	1.41	—3.15
Pensacola....	1 75	—2.93	5 97	pl2.97	3.01	—2.45	1.68	—1.80	0.04	—3.29	2.88	—2.55
Quincy.....	2 06	.....	.....	.....		.....	....	.....	....	. ..	....	.....
Tallahassee...	1 13	—3.00	3.06	—1.02	2.16	—3.23	0.87	—1.89	1.55	—2.65	4.49	—1.25
Wausau.....	1.15	.....	5.15	.....	2.59	.....	2.88	.....	0.80	.....	5.00	.....
St And'ws B'y	...	.....	5.52	.....	1.82	.....	0.76	.....	1.50	.....	2.81	.....
Stephensville	....	....	..	....	1.90	.....	0.72	.....	0.40	.....	3.11	.....

pl. means plus. *Plus departure.

YEAR 1898, WITH DEPARTURES FROM THE NORMAL—Continued.

July.		August.		September		October.		November		December		Annual.	
Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.	Precipitation	Departure.
5.92	—2 72	9.35	pl1.37	4.07	—7.07	14.65	pl5.62	0.40	—0.78	7.19	pl4.51	49.58	—19.13
13.93	pl3.37	18.48	*10.64	10.37	pl3.03	3.98	pl1.32	0 87	—0.92	1.89	—0.25	58.53	pl3 07
8.16	—0.89	11.62	pl3.77	10.73	pl2.90	4.99	pl3.56	1 29	....	3.72	....	47.17	—10 94
3.10	....	19.90	....	4.70	.....	T.	....	...	....	....	....	....	.....
....	....	20.56	....	3.95	....	9.73	....	4.84	....	5.54	....	....	.....
9.83	...	22 98	....	6.70	....	3 20	....	7.53	....	4.52	....	69.89	.....
6 42	.....	11.12	....	4.23	....	3.13	....	5.10	....	9.40	....	55.71	.....
....	....	....	....	3.16	....	4.82	....	....	....	....	....	....	.....
5.60	—1.13	12.35	pl5.19	16.40	*10.87	3 30	—0.02	7.44	pl3.37	3.11	—1.22	66.11	pl3 50
5.26	pl0.98	7.92	pl3.81	1.13	—1.50	2.54	pl0.29	7 09	pl3.74	3.69	—0.69	39.75	—12 47
4 84	—1 82	18 58	*10 22	17 93	*12 74	4 74	pl1.41	6.73	pl2 79	4 05	pl0 30	72 20	*15 .11
....	....	....	....	....	.....	....	....	....	....	.....	....	....	.....
10.00	pl1.71	15.43	pl8.96	2.63	—2.65	10.03	pl6.58	3.52	pl1.01	8.75	pl1.98	60.64	pl0.55
4.23	....	20.68	....	....	....	.	....	6.21	....	8.70	....	...	.....
6.07	....	31.06	....	5.03	....	3.81	....	6.64	....	11.80	....	....	.....
21 90	....	16.46	....	7.59	....	4.05	....	2 70	....	2.50	....	....	.....

pl. means plus. *Plus departure.

VOLUNTEER OBSERVERS.

Station.	Observer.
Archer	W C Andruss.
Bartow	J S Wade.
Blountstown	Mrs A Jeter.
Boca Raton	T M Rickards.
Brooksville	F L Robertson.
Carrabelle	A P Pennell.
Clermont	W M Kern.
Crawfordville	J H Hunt.
DeFuniak Springs	J T Stubbs.
Earnestville	I B Dobell.
Estero	O F L'Amoreaux.
Eustis	H W O Margary.
Federal Point	Chas Ingalls.
Fort Meade	James Thompson.
Gainesville	Jas Bell.
Grassmere	J B Escott.
Haywood	D L Burke.
Homeland	F H Farrall.
Huntington	B N Bradt.
JACKSONVILLE	SECTION CENTER.
Jasper	W A Cate.
Jupiter	U S Weather Bureau.
Key West	" " "
Kissimmee	J A Simpson.
Lake Butler	B F Johnson.
Lake City	W B Knight.
Live Oak	C J Hildreth, Jr.
Lemon City	E L White.
Lakemont	F W Porter.
Macclenny	H L Reed.
Manatee	C V S Wilson.
Merritts' Island	Rev James White.
Myers	M M Gardner.
Mobile	U S Weather Bureau.
Montgomery	" " "
New Smyrna	C Westall.
Oak Hill	E S Coutant.
Ocala	W L Jewett.
Orange City	S M Morse.
Orange Park	E R Latham.
Orlando.	E A Richards.
Oxford	W A Sparkman.
Pensacola	U S Weather Bureau.
Plant City	Wiley Stinson.
Quincy	Wm Corry.
Savannah	U S Weather Bureau.
St. Augustine	Surgeon, U S A.
St. Andrews' Bay	W A Emmons.
St. Francis	J C Peyton.
Sebastian	S Kitching.
Stephensvill	M F King.
Switzerland	W C Steele.
Tallahassee	Rev W H Carter.

VOLUNTEER OBSERVERS—Continued.

Station.	Observer.
Tampa	U S Weather Bureau.
Tarpon Springs	C D Webster.
Wausau	J B Glen.

Immigration.

Since my last report on this subject much history has been made, and no little written which has had considerable effect on the movement of that class of people from among whom the larger number of new settlers in all countries are usually obtained, and large numbers of persons have changed their residence who had never before seriously given thought to the subject. The stirring events of the year just passed has apparently revolutionized feeling, sentiment and ideas of the people of other sections of the country concerning conditions, opportunities and possibilities of the South, and Florida in particular; for although the immediate effect of the war with Spain was to lessen the number of enquiries concerning immigration to Florida, and which continued for only about four months, the large number of persons composing the army located in the State, mainly volunteers, with thousands of their relatives and friends, many of whom took advantage of the opportunity to study for themselves conditions of which they could only heretofore learn second handed, gave an impetus to the demand for information, which has steadily increased until the number of enquiries has about reached the point it had attained when the great freeze of 1895 came upon the State. It is strictly within the bounds of truth to state that there is to-day a greater demand for information about Florida's resources and the possibilities for the investment of capital by both home-seekers and capitalists than for ten years past. It has been suggested that the increased value of the principal farm products in the west would serve to check the tide of immigration setting southward, but as yet it appears to have had no perceptible effect in that way, but has apparently rather stimulated the efforts of a great many who realize the opportunity it gives them to make a long desired move; the higher price obtained for their wheat has enabled them to change without sacrifice, and to obtain better value for their homes and lands they leave behind them; many come by force of health conditions, many from choice, and all because of a desire to better their condition, and at the same time find homes in a more congenial climate. The marvellous rapidity and apparent ease with which the orange and other branches of the fruit industry have recovered from the effects of the great freeze, has also stimulated immigration towards the fruit and truck growing section of the State, while the wonderful possibilities

of the unusually profitable business of stock raising for both the northwestern and West Indian markets has induced large numbers of persons to begin anew that much neglected industry in the northern and western sections of the State. In January and March of 1898, the Internal Improvement Board, through its generosity and appreciation of the good to be derived from advertising in an attractive manner the advantages and resources of the State, purchased for the use of this Bureau in the interest of immigration three thousand five hundred copies each of two editions of the Times Union and Citizen; the publication, represented all sections of the State, and has been of great service to the Bureau in the distribution of valuable statistical, discriptive and historical information, and is well worth the price paid for the seven thousand papers, which was one thousand dollars. In addition to the above, the immigration material distributed by the Bureau consisted of official reports of the Department of Agriculture, the Lake City Experiment Station and county pamphlets descriptive of the counties at large in many cases, and in others of special features of industry worthy of special attention; yet with the publications referred to, the Bureau is short of material in certain lines that are positively necessary to a thorough answer to all inquiries; to this end, there is but one really effective way to supply the deficiency, and that way is by the publication of a complete hand book of detailed information; the time has passed when people bought property at long distances on vague information just for chance, nor can they longer be induced to break up a home, and risk founding a new one in a new land, without the best assurances and proofs that the representations made are truthful; the man who has money to invest in industrial enterprises will not risk his capital 'till assured that it will be both profitable and safe. People of the character above referred to want facts, they want them authoritative, and they should have them; fortunately the Bureau is as a rule able to furnish at least to a limited extent satisfactory explanation, by means of the statistics of various kinds gathered by the Department of Agriculture; but such a work as the one referred to would facilitate matters much and add vastly to the fullness of the information. Since my last report, the Bureau has replied in various ways to upwards of fifteen thousand inquiries, from every section of the United States, and from almost every nationality on the globe; perhaps as many as three thousand came from Canada alone, mostly in the section of country adjacent to Toronto, where it is only just to say that quite a lively interest in Florida was created by Col. W. S. Webb's

car, "Florida on Wheels," a year ago; quite a number who saw the car afterward came to Florida, and while in this office mentioned it in very complimentary terms. From the best information obtainable, after a thorough and careful canvass of the subject, we estimate that the increase in population during the past two years has brought the number up to at least five hundred and twenty thousand (520,000). Quite a large number of communications have been received from people who have formed themselves into mutual association for colonization purposes, with the object of keeping together and having their own community of neighbors and friends; such a policy has been encouraged as far as possible by the Bureau, and should be pursued by all persons having property to offer for sale to immigrants; it prevents homesickness on the part of the females of the families, 'till they become accustomed to the new situation, and form new friends; for it is a well-known fact that the discontent and unhappiness on the part of the feminine portions of the families, on account of the apparent loneliness of their situation, does more than all else combined to create dissatisfaction and break up new homes; therefore the Commissioner in his correspondence with the societies referred to has made a special point of urging upon them the great advantage to be gained by settling in communities of their own, particularly in the sparsely settled sections of the State, and also in those sections where there is a large population of negroes.

In view of the new conditions that are presenting themselves rapidly to the world, I feel that it is only proper to again refer to the necessity of a Geological Bureau for the State. Now is the time, if ever anything is to be done, to bring to the light of day our mineral resources, slumbering by reason of a system of false economy and a lack of a spirit of enterprise sufficient to arouse interest in the development of these resources. We know that our State is rich in minerals, but they might just as well not exist as to lie useless in their places. We should have factories by the score; we have the material to support them within our own borders, and under the new order of things we have become the gateway of the nation through which millions in trade will flow to the West Indies and Central and South America. The construction of the Nicaragua Canal, which now seems assured, should make Florida the base for hundreds of profitable manufacturing enterprises of all kinds. Our proximity to these markets, and the saving in freight charges from far interior points, by rail, or long distance transportation by water, makes this in the very nature of things the best and most available locality for the establishment of such industrial enterprises; from Pensacola

along the Gulf Coast to Key West, and along the Atlantic to Fernandina, there are scores of available situations for the establishment of manufacturing enterprises of all sorts, with water enough to float all the vessels of great or ordinary draft, required to supply the entire West Indies and the Continent South of us with our products; these are not theories, but facts, patent to every observer, and they offer the strongest inducements for profitable investment of capital and the employment of labor at remunerative wages; it can be but a question of short time when the opportunities offered will be taken up by progressive and enterprising people who have the foresight and good judgment to realize what the future has in store for Florida.

I again suggest the publishing in pamphlet form of a properly classified list of all the trees and shrubs, and other plants belonging to the flora of Florida, with the purposes for which they are used; if this information was placed before the people hundreds would find lucrative employment in the cultivation and preparation for market of large quantities of herbs that are in constant demand all over the world, for various purposes; large numbers of these being indigenous to this State, they can be grown here to greater advantage than elsewhere. It would be a small sum well spent; most of the Southern States have already done this.

In concluding this report, we say candidly, that if the Commissioner was better provided with descriptive printed matter by all of the counties, and in larger quantities and of a higher class by those that do furnish it, greater good would come of it, and more of the people who get such literature would be influenced in making permanent homes in Florida. But for the great assistance we have received from all those who are interested in our State's welfare, and we count them by the score, we tender our sincerest thanks, and to the newspapers of the State who battle unceasingly for Florida's benefit, to the Boards of County Commissioners, Boards of Trade, and patriotic individuals who have given generously of their time in the cause of immigration, we extend our cordial acknowledgments, and to the Board of Internal Improvement, for its generosity in supplying much needed literature, we extend our thanks in behalf of the people of the State. To Your Excellency, for your warm hearted friendship and your valuable assistance and advice concerning the business of the department, I tender you in the highest sense my grateful appreciation and thanks.

Very respectfully,

L. B. WOMBWELL,
Commissioner of Agriculture.